



FLORA TRADE

Between Egypt and Africa in Antiquity



edited by Ilaria Incordino and Pearce Paul Creasman

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Proceedings of a conference held in Naples,
Italy, 13 April 2015

edited by
Ilaria Incordino
and
Pearce Paul Creasman



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Front cover: Portion of the Punt reliefs from Hatshepsut's temple at Deir el Bahri (photograph by Noreen Doyle).

Contents

Contributors

Conference scope, participants and papers delivered

Acknowledgments

Foreword

Pearce Paul Creasman

1. Egyptian myths and trade of perfumes and spices from Punt and Africa

Sydney H. Aufrère

2. Piove su Punt

Franco Crevatin

3. The scents of Punt (and elsewhere): trade and functions of *sntr* and *'ntw* during the Old Kingdom

Andrés Diego Espinel

4. African *aromata* in Egypt: the “*ti-shepes*”

Ilaria Incordino

5. Uresh-nefer’s image of the World

Dieter Kurth

6. “*They shall come to trade at Iken.*” Ports and river in second millennium BCE Nubia

Andrea Manzo

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Conference scope, participants and papers delivered

Flora trade between Egypt and Africa in Antiquity

13 April 2015
Held at the Palazzo du Mesnil, Naples, Italy

Scope

The seminar was planned within the framework of the FIRB (Future in Research, call of 2012) project “Linguistic and Cultural Zones of Transition in Africa (ATrA),” funded by the Italian Ministry of Education, University and Research (MIUR). The project’s activities and events can be found at www.africantransitions.it. The working team is composed of ethnolinguists and anthropologists, archaeologists and researchers from several Italian universities (Trieste, Torino, Napoli “L’Orientale”) who have, as a priority, the idea to form the international debate on those issues of language, cognition, culture and identity which are characteristic of unstable, fragile and unpredictable contexts of transition, especially in Africa. The collaboration of experts of the different disciplines of the social and behavioral sciences can provide for a meaningful interdisciplinary approach, which should lead to a more complete interpretation of complex and interconnected facts. The seminar about the ancient “Aromata” trade between Egypt and Africa aimed, specifically, to share the results of the most recent studies about commercial networks and cultural contacts in the area, towards a better understanding of the identity of different cultures in comparison to the “foreign” world and the ideological value of its products.

Program as presented

Sydney H. Aufrère (Centre national de la recherche scientifique, Aix en Provence)

Egyptian myths and trade of perfumes and spices from Pount and Africa

Giorgio Banti (University of Naples “L’Orientale”)

On some linguistic evidence of trade links between ancient Egypt and the Horn of Africa

Marilina Betrò (University of Pisa)

Incense and aromata Egyptian lexicon in the 1° millennium B.C: new trade routes?

Franco Crevatin (University of Trieste)

It rains on Punt

Andrés Diego Espinel (Instituto de Lenguas y Culturas – CSIC [Madrid])

The scents of Punt (and elsewhere): Trade and functions of sntr and ‘ntw during the Old Kingdom

Ilaria Incordino (University of Naples “L’Orientale”)

African aromata in Egypt. The “ti-shepes” trade: a case study

Dieter Kurth (Hamburg University)

Uresh-nefer’s image of the world

Christian Leitz (Tubingen University)

Punt and its products in the temple of Athribis

Andrea Manzo (University of Naples “L’Orientale”)

Bi3w Pwnt in the archaeological record

Rosanna Pirelli (University of Naples “L’Orientale”)

Sahure’s and Hatshepsut’s Punt reliefs in comparison

Paula Veiga (Munich University)

Green Osiris. A divine intervention in ancient Egypt. An example: wine

Program announcement



FLORA TRADE BETWEEN EGYPT AND AFRICA IN ANTIQUITY



DOTTORATO IN STUDI SU ASIA, AFRICA E MEDITERRANEO

Sydney Aufrere (CNRS Aix en Provence)

Egyptian Myths and Trade of Perfumes and Spices from Pount and Africa

Giorgio Banti (IUO)

On some linguistic evidence of trade links between ancient Egypt and the Horn of Africa

Marilina Betrò (Università di Pisa)

*Incense and aromata Egyptian lexicon in the 1° millennium B.C.:
new trade routes?*

Franco Crevatin (Università di Trieste)

Roads to Africa

Diego Espinel (Madrid University)

*The scents of Punt (and elsewhere) –
Trade and functions of sntr and ḡntyw during the Old Kingdom*

Ilaria Incordino (Università degli Studi di Napoli L'Orientale)

African Aromata in Egypt. The 'ti-shepes' trade: a case study

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LUNEDI' 13 APRILE 9:30 Palazzo du Mesnil

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The Editors



Foreword

Improving our understanding of ancient Egypt's vastly diverse uses of native and imported flora is an extraordinarily large endeavor. In practical terms, such an expansive subject must be approached in manageable portions. The ATrA Project (African Transitions: Linguistics and Cultural Areas of Transitions in Africa, www.africantransitions.it) made important strides in this regard during its three-year mandate (May 2013 to February 2016). One component of this ambitious and invigorating program was the *Flora trade between Egypt and Africa in Antiquity* conference, held in April 2015. Eleven scholars presented papers of which six can be found in this volume.

The papers here focus primarily on *aromata* (the fragrant exotic flora so essential to rituals in ancient Egypt), its source(s) and acquisition, and clarifying the ancient terminology. Especially prominent in any discussion of aromata and Egypt is the land of Punt. Supplies of luxury items from Punt, such as frankincense, played a significant role in the religious and political spheres of Egypt. Without development of a deeper understanding of these commodities – which this volume begins to undertake – certain critical lacunae will continue to impair our understanding of the religious and political aspects of ancient Egypt.

Pearce Paul Creasman
University of Arizona (USA)

Chapter 1

Egyptian myths and trade of perfumes and spices from Punt and Africa

Sydney H. Aufrèrè

Given the titles of the papers presented at the conference, during which most of the lexicographical spectrum related to the issue of perfumes and aromatics was covered, it seems relevant to focus on a cultural paradigm dealing with the trade of perfumes and spices. Thus this paper discusses the constituent themes of compositions related either to the mythical emergence of such products or to certain aspects of deities who embody, under the aspect of Falconidae, creation, movement, and transport of aromatics. The purpose is to try to lift the cloud of a circular discourse, which, although diffuse, nevertheless remains a coherent principle that allows us to better understand some aspects of recipes of traditional liturgical ointments or drinks supposed to affect either the well-being of their divine recipients or to induce their virtual return process to a Freudian *originaire*.¹

Indeed, reading the priestly texts allows us to define a specific enjoined paradigm, which, if its modalities may vary from one priestly group to another, belongs to a single-minded family.

Presently, it is essential to bear in mind the ethnocentric vision of any trade represented as traditional tributes, provided that this vision aims at territories with an ethnic reality, unlike the ethnically devoid neighboring Egyptian deserts. Besides the practical aspects – which include exploration, trade, and transport – religious belief and mythology are never far apart. For example, the upstream Redesiyyeh gold miners are enjoined not to divert the gold to be collected in the crevices downstream, insofar as it represents the “flesh of Re”, words whose content is underpinned by a discourse supported by mythological texts and still alive in Egyptian society of the fifth century CE.² Hence we must appreciate the importance not to underestimate, in principle, mythical beliefs concerning materials less precious than gold and to unveil an attempted categorization that underlies a nonlinear discourse, which nevertheless reflects not only a poetic but a genuine system of thought.

In terms of perfume and spice trades between Egypt and Punt, the perception is indeed focused on oleoresins specific to a broad geographic area stretching on both sides of the Red Sea, once the Bab el-Mandeb is crossed, or which are in transit there and subsequently become like those of an exotic land with indefinite border. Moreover, in order not to have monofocal vision, it is useful to comply with an emic-etnic³ approach to better determine the width of the spectrum of products that we can consider as perfumes or spices.⁴ As such, this paper will examine the main lines of this system of categorization in two points, followed by a special application and, finally, the change in the level of metatextuality.

1. Objective classification: use in the real world

In the field of oleoresins, temporal and religious texts reflect a tension between those that try to classify such products based on objective criteria (real world) and those based on subjective criteria, from a mythological point of view (divine world) in order to give them a particular resonance.

First, and seen from a lexical nomenclature point of view, in the absence of a rigorous classification of precious products according to a pre-Linnean Egyptian system – naturalist kingdoms: animal, vegetable and mineral – one notes, from one era to another, the lack of stable determinants that would allow one to categorize them objectively. This instability of determinants is representative of the difficulty of classifying products exported in bulk and which, on reaching Egypt, may have lost their original appearance and consequently the source of the gemmiferous plants and memory of their specific production processes.

It is surprising to observe that what the Egyptians considered as liturgical ointments were composed of an amalgam of materials – precious minerals and metal cocktails, mineral and vegetable oils, oleo-resinous products used to connote olfactory nuances – not necessarily related to what we consider today as fragrances and shades of color and light. The objective was to recompose, in a performative way, the splendor of the primal time to favor some types of interactions. Let us add that it was not possible in antiquity to isolate product lines – minerals and vegetables – according to the same nomenclatural concern as today.

2. Subjective classification: the mythological use (divine world)

Dealing with a concept of classification other than Aristotle's for living beings and Theophrastus's for plants, the Egyptian priestly milieu postulated a mythological origin of the materials necessary for divine worship, which led to a circular logic. Nourished by a pre-philosophical thought, the origin emanated from the desire to rationalize the emergence of the aforementioned products and, consequently, their practical operation in more or less distant lands within a circle drawn around the Nile Valley. From a religious perspective, these (revisited) territories then became the places of choice for some specialized gods related to aromatic products. The mythical discourse allows us to discern the original implementation, the trigger mechanism of germinal gummiferous or mineral processes under the influence of divine events during territorial or extra-territorial adventures. It justifies the practical operation, the processes, and the increase in trade with those who not only are holders – i.e., guardians – but also own the processes that played an essential role in the representation of the Egyptian world. From then on, the religious discourse was associated with the emergence of such to primal times. This was the time when animals acquired their noxious capacities, such as snakes their venom,⁵ and when plants and products extracted from them, used for craft and art respectively, as well as mineral deposits, were conceived. Indeed, viewed through the priestly prism and whatever their nature might be – animal, vegetable, mineral – the origin of products that have a role to play in a divine process is provided on the basis of literary processes that depend on the creativity of their inventors, which may vary according to the context. If certain texts, such as Papyrus Jumilhac or the Papyrus of the Delta, where the regions and districts of Egypt are seen as places of conflict, respectively evoke blood (*snf*),⁶ semen (*mtw.t*)⁷ or tears (*rmj*),⁸ humors (*rdw*)⁹ of divine beings as the origin of minerals, plants or substances derived from these, others, such as Papyrus Salt 825, consider blood (*snf*),¹⁰ saliva (*mw*), sweat (*fd.t*), tears (verb, *rmj*), vomit (*bš=f*),¹¹ or spit (*k'=f*)¹² associated with sadness,¹³ with numbness by gods,¹⁴ or lacking any apparent cause.¹⁵

Precious or not, but always of great importance in ritual processes, these products are considered divine fluids that first ooze from the ground, then become subject to different germinal processes (*rd*),¹⁶ followed by metamorphosis (*hpr*).¹⁷ In this paradoxical sequence of rationalization and explanation (probably initiated during the New Kingdom but amplified in the Late Period) some mythological compositions relate them to different causes, each cause being specific to a location and establishing affinities with deities who in a very distant past thought, suffered, and reacted.

In Papyrus Salt 825 the production process (which can be carried out in one, two, or three steps) of a significant number of products and their ingredients¹⁸ are listed in the instructions given for the

creation of the statuette of Khentymentiu; this ends by mentioning how to incorporate the ingredients in appropriate quantities.¹⁹ Among these products,²⁰ we find the origin of several groups of products that, at that time, probably had lost their specific meaning in favor of a more general one.

1. A group of resinous conifers identified with the generic term ‘š²¹ and their by-product, the nice-smelling wood tar considered to be *sff*.²² We must add *sntr* oleoresin, which likely refers to exudates of *Pistacia terebinthus*,²³ a species of tree widely distributed in western Asia. According to their origin, this group of products refers to the Middle East in the broader sense.²⁴
2. As to *mrh*, asphalt, it connotes an area of the desert, especially the native asphalt deposits of Gebel el-Zeit, near the Red Sea. This is a generic term, which means all the asphalts including those of Judea.²⁵
3. Finally, the oleo-resinous exudates, including dry frankincense (‘*ntjw šw*),²⁶ that come from plateaus of Somalia, Ethiopia, Yemen, and Oman, not to mention *tjsps* extract – a product difficult to identify in this form.²⁷ They represent Punt or the Horn of Africa or even more remote exotic regions.

In this range of products, whose mythological origin refers to the East, mention is made of ingredients recurring in different recipes of liturgical ointments from the Laboratory of Edfu.

Of course, one must not expect to see in this presentation a sort of reading guide, but rather an indication that the process of emergence of mineral, oily, and oleoresinous products would be associated, in priestly thought, to significant divine episodes. That Papyrus Salt 825, which does not offer a very wide spectrum of products, is very demonstrative, although in a microstructural way; it may serve as a paradigm for addressing the mythological content of recipes of the liturgical ointments of the Laboratory of Edfu.

Although dating back to a tradition of the New Kingdom, and despite some lack of consistency, the common canonical list of oleoresins in the so-called laboratories of Edfu and Athribis shows explicit links between tear-shaped oleo-resinous products and divine eyes and/or limbs.²⁸ This is not surprising, considering the nature of the exudates. There are basically three types: the exudate of frankincense trees (*Boswellia* spp.) is collected after making three successive incisions (notching process) traditionally made on the main trunk, allowing it to “immediately weep” a clear (summer – fall) or red (winter – spring) oleoresin; the myrrh shrubs (*Commiphora* spp.) naturally weep (so it is not necessary to notch them), and their oleoresin turns red on drying; the styrax (in French, *aliboufier*) (*Styrax officinalis* Linnaeus 1753), which, following trunk incisions, flows in white drops that thicken in contact with air and is easily collected.

Assuming that milky aromatic resins (*hd.w*) are usually presented as emanating “from the divine body,” these products appear as productions that, divided into many sub-categories, are said to appear in (*hpr m*) or come from (*pr m*) a divine body²⁹ – which means roughly the same thing – or are said to be assimilated to the divine body. The data can be summarized in Tables 1.1 and 1.2.

These two tables show a range of sources – divine eye, iris, sclera, body, backbone, uterus, bones, breath, heart – of production of exudates that match, in Egyptian nomenclature, with two generic names: 1) ANTY – oleoresins flowing in tear-shaped drops, which cover the varieties of frankincense and myrrh; 2) NENIB – products obtained by notches or distillation of odoriferous resinous woods, some of which may be the official styrax.³⁰ An Egyptian overview of these exudates, the names of which it is not necessary to translate at all costs,³¹ presents them as emanations of the “divine members” and divine eyes – those of Re, Horus, and Osiris – and thus they are considered positive forces. These are metaphorical names, however, used to identify the best-quality products available for “divine endowment” (*jh.t-ntr*).³² Under these conditions, it is reasonable to think that these emanations match the productions (at different stages of harvest) of species endowed with recognized qualities and commonly used today in trade: *Boswellia sacra* Flueckiger 1867 (= *B. Carterii* Birdwood), *B. frereana* Birdwood, *B. papyfera* (ex Caill Del.) Hochs, *Commiphora myrrha* (Nees) Engler 1883 (bitter myrrh) and *C. guidotii* Chiov. (sweet myrrh or opopanax).³³ All of the eleven ANTY emanating in a hierarchical order, from the iris of the Eye of Re, the sclera of the eye of Atum, the eye of Osiris or the

eye of Horus, are intended for the perfumery in all the temples of Upper and Lower Egypt,³⁴ while the iris of the Eye of Re, the eye of Osiris, the Eye of Horus, associated with exudates NENIB³⁵ and other products, are intended for the long making of HEKENU ointment.³⁶

Table 1.1: Divine origin of ANTYU

Anty appearing from (<i>ḥpr m</i>)	Anty emanating from (<i>pr m</i>)	Assimilation of anty with parts of the divine body
<i>Categories used for sacred perfumery</i>		
Eye of Re Aufrère 2005, 254 (ANTYU <i>âuycha</i> and ANTYU <i>galnuân</i>)	Eye of Re <i>Ibid.</i> , 254 (ANTYU <i>galnuân</i>)	Eye of Horus <i>Ibid.</i> , 255 (ANTYU <i>nehed</i>)
	Eye of Osiris <i>Ibid.</i> , 254 (ANTYU <i>galdeden</i>); 255 (ANTYU <i>reſef</i>)	Body of this god <i>Ibid.</i> , 254 (ANTYU <i>aâret</i>)
Left eye <i>Ibid.</i> , 254 (ANTYU <i>galdeden</i>)		
Sclera of Eye of Atum (<i>hd.t n.jrt Jtm</i>). <i>Ibid.</i> , 255 (ANTYU <i>aâuaret</i>)		
Atum <i>Ibid.</i> , 254 (ANTYU <i>aâuaret</i>)		
Divine heart <i>Ibid.</i> , 255 (ANTYU <i>ahem</i>)		
Bones of the divine body (<i>ks.w n h'w-ntr</i>) <i>Ibid.</i> , 254 (ANTYU <i>galta</i>)		
Backbone of this god (<i>psd n ntr pn</i>) <i>Ibid.</i> , 255 (ANTYU <i>inausââ</i>)		
Great-Princess (<i>t3-Jtj.t wr.t</i>) <i>Ibid.</i> , 255 (ANTYU <i>qy-deben</i>)		
Uterus of the female falcon (<i>k3.t n mw.t</i>). <i>Ibid.</i> , 255 (ANTYU <i>ahem</i>)		
<i>Unusable categories for sacred perfumery</i>		
Breath of Seth (<i>ḥym stš</i>) <i>Ibid.</i> , 256 (ANTYU <i>kheskhes</i>)		Iris of Seth's eye <i>Ibid.</i> , 256 (ANTYU <i>yah</i>)
		The above part of Seth's eye <i>Ibid.</i> , 256 (ANTYU <i>mâshâ-r-au</i>)

Table 1.2: Divine origin of NENIB

Nenib emanating from (<i>pr m</i>)	Assimilation of nenib with parts of the divine body
<i>Categories used for sacred perfumery</i>	
Iris of the Eye of Re Aufrère 2005, 256 (NENIB : black woody matter)	Eye of Osiris <i>Ibid.</i> , 257 (NENIB : red woody matter)
	Eye of Horus <i>Ibid.</i> , 257 (NENIB : 1) white woody matter; 2) woody matter whose name is <i>maut</i> ; 3) woody matter whose name is <i>keruru</i> ; 4) woody matter with <i>sery</i> production)
<i>Unusable categories for sacred perfumery</i>	
	Image of Sekhmet (<i>shm Shm.t</i>) <i>Ibid.</i> , 258 (NENIB: woody matter whose name is <i>imykhery</i>)
	Eye of Seth <i>Ibid.</i> , 257 (NENIB : 1) dry woody matter whose name is <i>shareh</i> ; 2) woody matter whose name is <i>emtudeshet</i> ; 3) woody matter whose name is <i>âaâdjeter</i>). These three products are among the four not allowed in the Laboratory.

Nonetheless, one will note *en passant* that three second-choice ANTY oleoresins and two others cannot be processed in the laboratory perfumery³⁷ because they come from the land of Kush. Such an attitude toward Kushite products stems from the traditional animosity of the country itself, so that any product of poor quality or coming from it is considered as being of a deeply Sethian nature. This is confirmed by Plutarch for animals, plants, and products.³⁸ For the same reasons, four qualities of NENIB exudates³⁹ cannot be processed in the divine perfumery.

A special case: ANTY *ahem* and the myth of the phoenix

Now that we have defined the outline of this system it becomes possible to select an application. In some liturgical texts traces of myths emerge from time to time. In the list of ANTY and NENIB oleoresins the hierogrammat has seen fit to explain some of them through metatexts: technical and mythological glosses. If we put aside the latter, we observe that it is written that ANTY *ahem* is considered as the “emanation” of the divine heart. Of course, when information is so succinct, risk of speculation is never far away. But nothing could be added to the understanding of the origin of the ANTY *ahem* – as in so many other cases – if the passage did not contain the etiological explanation shown in figure 1.1:



Because ANTY *ahem* manifests itself in the uterus of the female falcon after her heart (that of the female falcon) complained while crossing the land of Punt (*hpr 3hm js m k.t n bjk.t m-ht 3hm jb=s m-ht Pwn.t*).⁴⁰

According to this interesting gloss, unfortunately taken out from its mythological context, it would seem that the production of this oleoresin, as other products of Papyrus Salt 825, would result from an emotion. Emotion would manifest itself through the heart, which is the center of all emotions, the divine itself (*ntr*).⁴¹ We can postulate the following *modus formandi*: in response to the emotion felt (complaint *3hm* expressing itself through the intervention of the heart *jb*), the heart answers by secreting an oleoresin *Ahm* egg in the uterus of the female falcon. On the basis of this example we can deduce that the other oleoresins mentioned in the list of Edfu were attributed, in the hypotext (*Urtext*), to similar aetiologies, albeit in a more contextualized and more explicit form than those of Papyrus Salt 825.

In the light of these considerations, the idea of a female falcon (*bjk.t*) being associated with oleoresins meets with a certain acceptance. Indeed “female falcon,” epithet of several goddesses sharing some affinities (Isis, Ouadjet, Nekhbet and Hathor), is repeatedly represented in scenes in relief highlighting the offering of *sntr* and *'ntj* oleoresins.⁴² In such a context, it appears that this “female falcon” connotes the traditional female falcon “Hathor lady of Punt”⁴³ or “Hathor lady of the *'ntj*”⁴⁴ in the Puntite scenes at Deir el-Bahari. Although the womb of the goddess is the place where the oleoresin is formed, it may be that we are in the presence of a transcultural legend to which a Somali myth refers: having lost her kingdom and her children, a queen receives from the god she implores an adequate compensation in the form of frankincense and myrrh trees, which grew where her tears would have run.⁴⁵ One can suspect that old Puntite legends underlie such Somali and Egyptian etiological tales. As for the Greeks, they knew about the legend of Myrrha (or Smyrna), daughter of Cinyras, King of Cyprus, who was transformed into a myrrh tree by the gods because of an incestuous relationship with her father.⁴⁶

Back to the etiological process described above, where it is possible to discern the attachment of the writer to a sexualized view of the oleoresin *3hm*. The episode described is part of the land of Punt in the broad sense, a region where aromatics traditionally originate, but it also refers to a cultural reading. Indeed, the spelling of the oleoresin  *3hm* in question,⁴⁷ is a late-onset spelling of

 *jhm.t*, product which composes, together with other aromatics, the cargo of an Egyptian boat moored on a Puntite beach in the reign of Hatshepsut;⁴⁸ therefore initially linked to the issue of Punt.

The oleoresin  *jhm.t* raises many questions. Although myrrh receives, in the Greco-Roman period, the name  *hrj* (an idea supported by the Greek βάλ or Coptic ωλλ),⁴⁹ scholars such as Chassinat thought that the product *jhm.t*, in earlier times, could be another name for it. But at this late date, where the loss of lexicographic meaning requires the presence of glosses,⁵⁰ it is difficult to recognize in an appellation a single and same product. In the procession of gods and geographic bearers of allegories of aromatics whose outlines are carved on the plinth of the Laboratory of Edfu,⁵¹ the text in front of the figure of the country Khebeset⁵² deserves closer examination. The latter intervenes as “the tapper (of oleoresins trees) on the coast of Punt⁵³ and who harvests aromatics from God’s-Land.”⁵⁴ To him are attributed the following words, “I tap oleoresins of Punt and I carry what is inside it to Behedety in front of God’s-Land,”⁵⁵ which offer a synthetic aspect of the problem by referring to the Land of Punt or the God’s-Land: the figure holds in his right hand two masses recognizable as being the product *ḥm* (the legend says: “He taps *ḥm* oleoresin with his right hand”⁵⁶) that represents the paradigmatic ANTY; in his left hand, he carries another product defined as: “the black wood seized with his left hand, it is the scented product from which the *rbn* is extracted.”⁵⁷ In this example, the products respectively named *ḥm* and black wood (*ht km*) are simple paradigms of ANTY and NENIB and refer to the two main ointments used in the temple of Edfu, dedicated to Horus and Hathor (Gold): 1) HEKENU⁵⁸ to anoint the members of the god,⁵⁹ and 2) extract of NENIB,⁶⁰ which is considered as the “scented emanation of her (Hathor’s) sweat.”⁶¹

Can one not imagine, behind the myth and despite its propensity to allegory and metaphors, that there could be some underlying reality? Returning to the etiological gloss of sources given above, it associates the production of ANTY *ḥm* with the female falcon when it crosses the land of Punt and endows it with its aromatiferous nature. From that time, ANTY becomes a permanent, divine emanation, which, in turn, will be the subject of research and work by men under the control of the Egyptian sovereign.⁶² Notice that here emerges the idea that the falcon – including the species Barbary falcon (*Falco pelegrinoides* Temminck 1829) and lanner falcon (*Falco biarmicus* Temminck 1825)⁶³ – are divine vehicles. Their area of distribution covers the Nile Valley, the Sinai, the eastern coast of the Egyptian desert and the western coast of the Arabian Peninsula to Yemen and Hadramaut, the latter region often being recognized as being the land of Punt or as part of it.

According to the Egyptians, falcons, aware of the presence of the divine,⁶⁴ serve as celestial-specific markers for areas where minerals and oleoresins are exploited. In fact, the end of the introductory text of the Laboratory of Edfu basically develops the following idea: the aromatics come from the God’s-Land to the east of Egypt. It is there that the *ba* of Re, namely the Behedite, formerly landed. His head manifests as a majestic Falconidae. Together with his venerable daughter Weseret, another name for the Distant-one, he is delighted with the work that is done in the Laboratory using products of trees from the Valley-of-ANTY.⁶⁵ The writer seems to metaphorically describe a pair of peregrine falcons whose eyes are far reaching. But Edfu is also the place where the Behedite, lord of Punt and of the God’s-Land, watches over his father.

The son – father relationship can be questioned in terms of structure and of the allegorical representation of the translation of oleoresins from Punt or God’s-Land to Egypt. Another legendary form of it is found with the myth of the Phoenix considered as a myrrh carrier, as presented by Herodotus (484–420) (2,73),⁶⁶ under Persian rule, which probably echoes Heliopolitan clergy’s discourse. This *logos* pleads in favor of a link between Arabia, Egypt, and myrrh by way of Heliopolis, located at the opening of a road network from Arabia and transiting through the Sinai Peninsula, used by Nabataean caravans carrying myrrh from Yemen production areas to Petra. The link between myrrh and Heliopolis was not far from the attention of the priests of that city, provided that an ancient Egyptian tradition says that all oleoresins flow from the eye of the sun.

In structural terms, the myth connotes, through the translation of a myrrh egg-sarcophagus in which the phoenix envelopes his father, the trade of this oleoresin provided by the myrrh tree or balsam, which grows wild on the plateaus of the Horn of Africa (Djibouti, Ethiopia, Sudan, Somalia,

Kenya) and the southern end of the Arabian Peninsula (Yemen and Oman). The word used by Herodotus – σμύρνη – in connection with the city of Smyrna⁶⁷ in Asia Minor refers to mummification operations.⁶⁸ This term gives a Greek resonance to a product designated by its Semitic name (Hebrew *môr*, *muura* Canaanite, Aramaic *mûrâ*) which gave the Greek μύρρα.

Moreover, the identity of the transported product refers to oleoresins carried from the south of the Arabian Peninsula, on the western axis of Arabian routes that could be called Punt in the broader sense, according to Dimitri Meeks' significant critical perspective.⁶⁹

In Egyptian thought, these observations plead in favor of the belief in divine birds, which are both vehicles of and producers of aromatics, a metaphoric way of pointing out that Egypt avoids transport constraints. The same could be said of the divine lionesses able to bring back the scents of aromatics, such as Triphis associated with the primal time, Pakhet at Speos Artemidos associated with the Ethiopian ebony (*Dalbergia melanoxylon* Guil. & Perr.),⁷⁰ Smithis at Elkab and many others, in short in places where the Distant-one viewed from multiple perspectives, makes a theoretical return. But that is another story.

4. The rise of the level of metatextuality

Presently, the question must be raised concerning the very principle of the process, when we observe, generally speaking, that a rise in the level of Egyptian metatextuality occurred at the same time, per se an attempt to paradoxically rationalize a universe by strengthening boundaries of an ideal Egyptianness. From a literary perspective, these aetiologies tally with a metatextual approach developed within a hierogrammat milieu, based on a worldview in which each element needs to be enriched with a hermeneutical approach, in a world now subject to different currents of thought. However short they may be, these etiological legends, far from being free mental operations or hierogrammatic fantasies, reword the story of a very distant past and may overflow through their implicit content that refers to the underlying textual strata.⁷¹ The purpose of this type of mental operation, which could be considered in the Greco-Roman period as an aspect of the Egyptian "philosophy,"⁷² is to create some meaning through a mythological recontextualization similar to rationalizing the existence of products recurrently employed, whatever they be.

It is reasonable to think, to put it differently, that charged with an *originaire* meaning by means of divine aetiologies, the terms for materials used in ritual processes end up acquiring, in the eye of hierogrammats, an immanent divine power. Hence it follows that each ingredient is invested with a role both original, symbolic, connotative. It is raised to the rank of paradigm of a mythological grammar allowing the emergence of ideas related to olfaction, brightness, and prophylaxis not only in relation to the circumstances in which it was produced but also in connection with remarkable places of the Nile valley or exotic lands where the gods are said to have left traces of their emanations.

These, in turn, ritually stored in the so-called laboratories (*jz*),⁷³ are ready to be used in recipes of ointments.⁷⁴ They allow, by specific usages, to reconstitute, on the basis of a broad spectrum (which encompasses Punt, God's-Land, and the Middle East), an original environment made up not only of minerals, metals buried in the crevices of rocks, and oil welling up from the depths but also of by-products of quality and different olfactory nuances of oleo-resinous fragrances that may appease the god and impart the feeling that he is in an environment containing traces of a distant past. They are symbolic operators, recalling moments of pain caused by losses of divine fluids, which must be returned to their original owners. But the process may also involve beverages, like the fermented content of the *mnw* vase. This reddish liquid, which is not a human drink, establishes a relationship between the Distant goddess and the African space, so that among the many components of this drink are found fruits, fruit juices, medicinal plants, grains and their by-products, perfumes, ointments and spices and minerals whose production sites allow to draw mentally a commercial map. These various products, which cause a special palatability in the bloody lioness in the Myth of Destruction of Humanity, and their appearance may thwart her senses and create homesickness.

It might a priori seem obvious that just as the Greeks, in real life, did not believe that amber flowed from Eliades's tears,⁷⁵ nor did the Egyptians believe that oleoresins emanated from tears or

from whatever part of the body of the gods. However, the tradition – even residual – retains unusual strength in Egypt, so that the virtues of products like the famous kyphi – Egyptian *par excellence* – are not only related to their components, but also to their luni-solar value as suggested by Plutarch,⁷⁶ who had good informants.⁷⁷ To maintain such beliefs, on a poetic base, justified, a priori, a possible belief in the concept of a divine origin.

Notes

1. It is here based on the meaning of the concept of “*originaire*,” but without immediate connection with its Freudian application. Concerning the latter, see Binzoni 2008. One sees above all the summary that highlights the paradoxical nature of the psychoanalyst’s approach: “Mais, d’autre part, Freud confère au concept d’*originaire* une extension mythologique, si on entend par mythe une histoire racontée sans avoir été vécue de faits n’appartenant pas à la réalité objective et se rapportant à un temps *originaire*, d’avant toute chronologie.” – The bibliography of aromatics is important. See, for example, Baum 1994a–b ; 1999; 2003; Aufrère 1998b; Katz 2009, etc.
2. Aufrère 1991, 381.
3. Olivier de Sardan 1998.
4. The reading of Alain Corbin 1982 lets us see how the olfactory landscape is changing depending on the time and social classes.
5. Aufrère 2015c, 99–100.
6. P. Jumilhac II, 20 (*ššj.t*); II, 12 (*prš*), Vandier 1963, 114. This is the verb *hnd* “spread” which is used.
7. P. Jumilhac III, 3 (*bdd-kw*), Vandier 1963, 114. Ejaculation of semen of Seth transformed into a bull on earth (*hr s̄t mtw.t=f r b̄*) the latter grows as plants on the mountain” (*rd m sm.w hr dw pn*) and is transformed into the *bdd-kw* plant (*hpr m bdd-kw*).
8. P. Jumilhac XIV, 15 (Grape = iris of Horus; Wine = Horus tears) Vandier 1963, 126.
9. P. Jumilhac XVII, 17–18 (wheat and spelt) Vandier 1963, 129.
10. Including nosebleed: P. Salt 825, II, 3 (Geb : ‘š and *šfj*) Derchain 1965, 137, pl. 2*.
11. P. Salt 825, III, 1 Derchain 1965, 137 pl. 3*.
12. P. Salt 825, III, 1 Derchain 1965, 137 pl. 3*. In Greek mythology, anemone is born from either Adonis’s blood or the tears of Venus; cf. De Gubernatis 1878, 11. But the process is quite common; cf. De Gubernatis 1878, 108, 169, 199, 285 and *passim*.
13. P. Salt 825, I, 5–II, 1 p. 137, pl. 1* (everyone = souls, gods, goddesses, men, *akhu* spirits, dead, great and small animals: *šdh* drink) ; II, 1–2 Derchain 1965, 137, pl. 1*–2* (Horus : *sntr* oleoresin); II, 4 Derchain 1965, 137, pl. 2* (Shu: ‘*ntjw šw*) ; II, 5–6 Derchain 1965, 137, pl. 2* (Re : bee → flowers → honey and wax).
14. 1st case: P. Salt 825, II, 7, Derchain 1965, 137, pl. 2* (Re: linen); 2nd case: P. Salt 825, III, 2 (Re: papyrus); 3rd case: P. Salt 825, III, 3–4, Derchain 1965, 137, pl. 2* (Isis and Nephthys: *tjšps*). P. Salt 825, II, 7–8 Derchain 1965: 137, pl. 2*: “So Re was numbed (so that) the sweat of its members flowed on the earth; it germinated and grew as flax: thus happened clothing” (*wn-jn R’ bdš h̄i fd.t m h̄aw=f r b̄; rd=f hpr=f m mh : hpr hbs pw*). It is likely that the numbness of Re probably alludes to the moment when he is bitten by the snake shaped by Isis (cf. Koenig 1994, 158–162; Aufrère 2002). See also P. Salt 825, III, 3–4, Derchain 1965, 137, pl. 2*: “So, Isis and Nephthys were very numb; their sweat emerges from the ground and took root: thus happened the *tjšps*” (*wn-jn Js.t Nb.t-hwt bdš r wr sp-2 pr fd.t=w r b̄ rd=f hpr tjšps pw*).
15. The Greek texts abound of similar etiological legends, such as for myrrh, anemones, and red lilies.
16. P. Salt 825, II, 2 (Horus: oleoresin ‘*ntjw šw*); II, 3 (Geb: ‘š pine; *sff resin*), etc. Derchain 1965, 137, pl. 2*.
17. P. Salt 825, II, 2 (Horus: oleoresin ‘*ntjw šw*); II, 3 (Geb: ‘š pine; *sff resin*), etc. Derchain 1965, 137, pl. 2*.
18. P. Salt 825, XVI, 1–5, Derchain 1965, 143, pl. 2*.
19. P. Salt 825, XVI, 1–5, Derchain 1965, 143, pl. 2*.

20. Sea clays (*sjn*), sea sand, earth, resins (*sntr* resin, dry frankincense), pine-tree-juniper, pine resin (*sff*), *šdh* drink, wine, *tjšps* product, bee (*bj.t*) wax (*mnh*), honey (*bjt.t*), papyrus (*twf*), asphalt (*mrh*).
21. Notably *Abies cilicica* [Antoine and Kotschy], Carrière 1855; cf. Charpentier 1981, no. 268. Cedar should be excluded, which is certainly mrw wood (Charpentier 1981, no. 536).
22. Charpentier 1981, no. 944.
23. Charpentier 1981, no. 970: *Pistacia terebinthus*, Linnaeus 1753; Baum 1994a.
24. It is found in an area that includes Saudi Arabia, Israel, Jordan, Lebanon, Syria, and Turkey. Today, see the communication of Diego Espinel, “The scents of Punt and (elsewhere): trade and function of *Sntr* and ‘ntw during the Old Kingdom” in this volume.
25. Aufrère 1984.
26. *Boswellia sacra*, Flueckiger 1867 or *B. carterii*.
27. Charpentier 1981, no. 1338. But see the communication of Ilaria Incordino, “African *aromata* in Egypt. The ‘ti-shepes’” in this volume.
28. See the interesting movie on the harvesting of frankincense and myrrh directed by Frédéric Milano (2014).
29. Aufrère 2005, 254 (*s. v. ANTYU aâret*).
30. Aufrère 2005, 259.
31. Aufrère 2005, 272, n. 2.
32. Aufrère 2005, 258–259: “Quant à ces *ântyou* qui émanent des membres divins unis à ces styrax qui émanent des yeux divins, à savoir des yeux de Rê et des yeux d’Horus réunis à l’œil d’Osiris, on en fait l’onguent précieux *medjet* pour les dieux. Leur mélange en une seule entité est destiné à faire vivre leurs corps au moyen des humeurs émanant des membres divins.” In a final commentary, it incorrectly states that the association is to develop a “precious *medjet* ointment” different from the recipe of *medjet* ointment from the Laboratory; cf. Aufrère 2005, 238–240.
33. Katz 2009, 190, fig.1 (*Boswellia* and *Commiphora* in the Horn of Africa), 191 figs 1–2.
34. Aufrère 2005, 256.
35. Aufrère 2005, 257: in the recapitulation of NENIB exudates there are “three woods for the HEKENU ointment to anoint the divine members.”
36. Aufrère 2005, 224–235.
37. Aufrère 2005, 256
38. Plutarch, *Is. Os.* 50, 371, D–E.
39. Aufrère 2005, 257.
40. Aufrère 2005, 255 (ANTY *ahem*).
41. Aufrère 2015a, 39–40.
42. Leitz 2002, II, 775c–776a.
43. *Urk.* IV, 323, 5; 324, 1.
44. *Urk.* IV, 323, 5; 324, 1.
45. Katz 2009; Abdi & Pannoux 1993, 169 : “Il y a très longtemps de cela, une reine vivait dans la Corne de l’Afrique. Un jour, son royaume fut attaqué de toutes parts à la fois. Elle réussit à échapper à ses ennemis par miracle et alla se réfugier dans les montagnes du nord-somali. Là, en larmes, elle supplia son dieu de lui offrir un cadeau qui la consolerait de la perte de ses enfants et de ses terres. Alors, partout où ses larmes étaient tombées, des arbres aux gommes odorantes se mirent à pousser.”
46. Ovid, *Met.* 10, 500.
47. *Urk.* IV, 328, 17–329, 1–8 : “Loading the boats to the brim with wonders from foreign land of Punt, all the good aromatics of Country-of-God, heaps of ANTY gum, fresh ANTY trees, ebony and pure ivory, gold from the region of Asiatics, *tj-šps* extract and *hs³j.t* spice, *jhm.t* oleoresin, *sntr* oleoresin (and) galena (*msdm.t*).” Then follows a list of exotic animals.
48. *Urk.* IV, 329, 8; cf. Charpentier 1981, no. 173; Crum 1939, 557b.
49. Charpentier 1981, no. 849. See now the list of *ḥrj* myrrh species and their commentaries according to the texts of Athribis temple; cf. the communication and the accurate analysis of Christian

Leitz, “Punt and its products in the temple of Athribis,” a paper presented at the conference from which this volume derived.

50. Derchain 1976.
51. *Edfou* II, 197–202, 216–219.
52. The country of tappers.
53. Voir Gauthier 1927, 172–173. The term recalls the names of operators of oleoresinous trees, already mentioned in the inscriptions of Deir el Bahri.
54. *Edfou* II, 219, 5.
55. *Edfou* II, 219, 5–6.
56. *Edfou* II, 219, 6.
57. *Edfou* II, 219, 6–7. See also Chassinat 1968, 404.
58. Aufrère 2005, 224–235. The latter, the composition of which is long, is manufactured, according to the version, in 487 or 492 days.
59. Aufrère 2005, 224.
60. Aufrère 2005, 235–238. Making it lasts as long as the previous one, i.e., 303 days.
61. Aufrère 2005, 235.
62. See *Edfou* II, 197–202, 216–219 where the perfume wearers are led by the King and Queen.
63. About the importance of *Falco pelegrinoides* Temminck 1829 as bearer of god’s gaze in Egypt and the foreign lands, see Aufrère 2015b.
64. Aufrère 2015a.
65. In reality, their eyes can see a pigeon in flight at 6 km.
66. 73. “3. Ἐστὶ δὲ καὶ ἄλλος ὅρνις ἱρός, τῷ οὐνομα φοῖνιξ. Ἔγὼ μέν μιν οὐκ εἶδον εἰ μὴ ὅσον γραφῇ καὶ γὰρ δὴ καὶ σπάνιος ἐπιφοιτᾶ σφι, δι’ ἑτέων, ώς Ἡλιοπολῖται λέγουσι, πεντακοσίων· οσίων Φοιτᾶν δὲ τότε φασὶ ἐπεάν οἱ ἀποθάνη ὁ πατήρ. Ἐστὶ δέ, εἰ τῇ γραφῇ παρόμοιος, τοσόδε καὶ τοιόσδε· οτὰ μὲν αὐτοῦ χρυσόκομα τῶν πτερῶν τὰ δὲ ἐρυθρὰ ἐξ τὰ μάλιστα· αἰετῷ περιήγησιν ὁμοιότατος καὶ τὸ μέγαθος. [3] Τοῦτον δὲ λέγουσι μηχανᾶσθαι τάδε, ἐμοὶ μὲν οὐ πιστὰ λέγοντες· ἔξ οἱ Αραβίης ὄρμῳ μενον ἐξ τὸ ἱρὸν τοῦ Ἡλίου κομίζειν τὸν πατέρα ἐν σμύρνῃ ἐμπλάσσοντα καὶ θάπτειν ἐν τοῦ Ἡλίου τῷ ἱρῷ, [4] Κομίζειν δὲ οὔτω· ὑπρῶτον τῆς σμύρνης φόδον πλάσσειν ὅσον τε δυνατός ἐστι φέρειν, μετὰ δὲ πειρᾶσθαι αὐτὸ φορέοντα, ἐπεὰν δὲ ἀποπειρηθῇ, οὕτω δὴ κοιλήναντα τὸ φόδον τὸν πατέρα ἐξ αὐτὸ ἐντιθέναι, σμύρνῃ δὲ ἄλλῃ ἐμπλάσσειν τοῦτο κατ’ ὃ τι τοῦ φοῦ ἐκκοιλήνας ἐνέθηκε τὸν πατέρα· ἐσκειμένου δὲ τοῦ πατρὸς γίνεσθαι τώντο βάρος· ρέμπλασαντα δὲ κομίζειν μιν ἐπ’ Αἰγύπτου ἐξ τοῦ Ἡλίου τὸ ἱρόν. Ταῦτα μὲν τοῦτον τὸν ὅρνιν λέγουσι ποιέετν. Through Hecataeus of Miletus (550-480); cf. Hecateus, Frag. 324a = Porphyrius in Eusebius, *Praep. ev.* 10, 3.
67. Chantraine 2009, 1029a, which shows that the regular presence of the original *sigma* denotes influence of the name of Smyrna. We must abandon the arguments that claim myrrh was originally called “Smyrna.”
68. See for example σμυρνόω (verb), “to anoint with myrrh” (*Cyran.* 97); cf. Chantraine 2009, 1029a.
69. Meeks 2002; Meeks 2003a; Meeks 2003b.
70. Aufrère 2001b, 328.
71. It is difficult to speak of “subtext” in the sense that it could be heard today.
72. Aufrère 2016.
73. Aufrère 1998b.
74. For translations of the recipes of all these products, see Aufrère 1998b; 2003c; 2005.
75. Ovid, *Met.* 2, 364–366. See also Lucien of Samosate and Nonnos of Panopolis.
76. Plutarque, *Is. Os.* 80, 383E–384C.
77. Aufrère 2016.

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Chapter 2

Piove su Punt*

Franco Crevatin

Una stele della XXVI dinastia proveniente da Defenneh (greco *Daphne*¹; Fig. 2.1) occupa un posto di rilievo nella bibliografia egittologica perché ricorda un provvidenziale acquazzone e contiene un riferimento a Punt come fatto geografico reale e non semplicemente come terra favolosa dalla quale provenivano gli aromi.² La stele è mal conservata e oltre la metà del testo è cosparsa di lacune; qui riproduco per comodità del lettore la tavola dell'edizione originale; purtroppo l'apografo non è di buona qualità.

La parte inferiore della stele fornisce un testo continuo, eccezion fatta per lacune minori, peraltro facilmente integrabili:

(x + 11) ... sua Maestà. Sua Maestà si rallegrò moltissimo per questo ... e i soldati resero grazie al dio per sua Maestà (x + 12) [dicendo: “Com’è grande] il tuo potere, o re vittorioso, sovrano amato da tutti gli dei! Un grande prodigo si è verificato al tempo della tua Maestà, (x + 13) una cosa questa mai vista né udita: è piovuto sul monte di Punt ed è molto rara la pioggia nelle regioni del sud, (x + 14) questo non è mese di pioggia e neppure è stagione di pioggia nelle città del nord (dell’Egitto). (x + 15) È stata tua madre Neith di Sais che ti ha portato Hapy per far vivere tutti i soldati!”. (x + 16) Sua Maestà fece fare una grande offerta a tutti gli dei di questo paese affinché gli venisse concessa vita, stabilità e potere per sempre. (x + 17) Sua Maestà ordinò che questa stele di quarzite (?) fosse eretta nel tempio di Min signore di Copto ... perché durasse colà per sempre.

Secondo un’interpretazione molto diffusa un violento acquazzone sul “monte di Punt” avrebbe ingrossato i corsi d’acqua della regione i quali, riversatisi nel Nilo, avrebbero determinato una benefica piena,³ qualcosa di simile a quanto riferito dalla stele dell’anno VI di Taharqa (Gozzoli 2009). A suo tempo G. Posener⁴ ha sostenuto, con maggior verosimiglianza, che il violento acquazzone aveva ingrossato i *wadi* desertici, un fenomeno noto in regioni tropicali dell’Africa orientale e detto in arabo *sayal*, e dunque aveva provvidenzialmente dissetato una spedizione nel deserto orientale.⁵ Non ci sono dubbi possibili sulla correttezza di questa interpretazione e ciò per due ragioni:  *h'py* è la “piena d’acqua”, non esclusivamente l’inondazione del Nilo; gli Egiziani presenti all’evento sono definiti  (x + 15), ossia una “spedizione”. L’ambiente ed il tempo del prodigo sono sicuri: era un luogo montuoso (x + 5: ), di difficile accesso (x + 6: ), molto probabilmente povero d’acqua e da lungo tempo non frequentato

(). Il rovescio d'acqua si era verificato il giorno 12 del quarto mese della stagione di *pr.t*, ossia tra la metà d'agosto e la metà di settembre.⁶ Gli Egiziani conoscevano la località della regione – il *monte di Punt* – nella quale si erano recati, l'avevano frequentata tempo addietro, forse parecchio tempo prima e sapevano bene quali erano i problemi che potevano incontrare, in primo luogo quello del rifornimento idrico, ed erano informati sul regime delle piogge.⁷ La ragione della spedizione era certamente lo sfruttamento di risorse aurifere, come lascia intendere Posener.

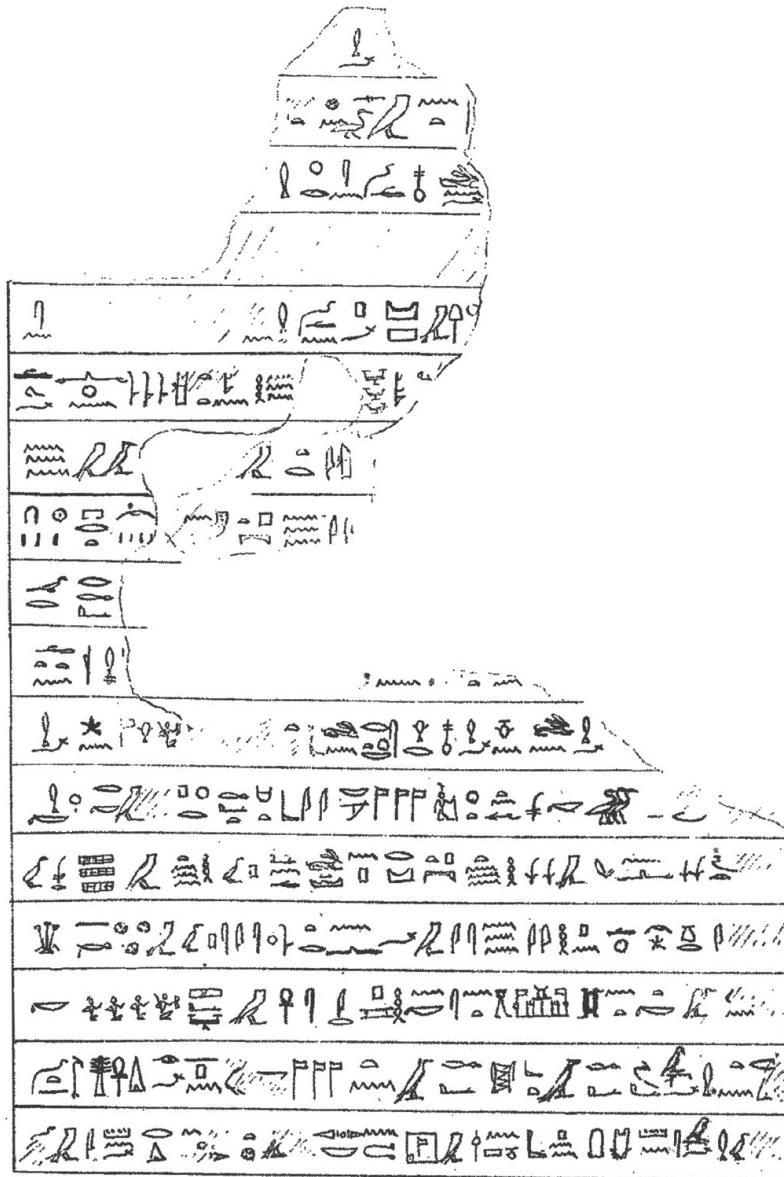


Fig. 2.1. Una stele della XXVI dinastia.

La stele era destinata al tempio di Min, signore di Copto, la divinità che proteggeva le piste che collegavano la valle del Nilo al mar Rosso e tutelava il deserto orientale, tuttavia non è chiaro in quale città egiziana fosse eretto tale tempio, perché una lacuna, nella quale resta forse una traccia del segno , preclude la lettura ed è forte il sospetto che la stele di Defenneh fosse la copia di un'iscrizione il cui originale era collocato altrove: la prova potrebbe esser costituita dal fatto che, stando al testo, la stele posta nel tempio di Min era di quarzite, , mentre la stele di Defenneh è di arenaria. Resta peraltro aperto il problema delle ragioni per le quali una copia è stata collocata a Defenneh.

Il *monte di Punt* è designazione – forse isolata – di una regione del deserto orientale meridionale e credo che per la sua localizzazione non sia significativo il *sayal*, evento imprevedibile, quanto l'esistenza in zona di una *stagione* delle piogge, pur se di modesta entità: ciò suggerisce una latitudine

non superiore ai 20° di latitudine, più o meno nella regione sul mar Rosso che corrisponde alla terza / quinta cateratta, regione che conosce una stagione estiva delle piogge, per cui effettivamente il periodo nel quale era stata condotta la spedizione non era stagione di piogge, come ben precisa la stele.⁸ Saremmo dunque nelle vicinanze immediate delle celebri “miniere di Punt”, *bȝ Pwnt*.⁹

Una spedizione mineraria fuori dall’Egitto per via di terra sarebbe stata impresa doppiamente rischiosa prima della campagna militare nubiana di Psammetico II, mentre uno spostamento navale sarebbe stato facilitato dall’impegno militare e strategico che Necho II aveva profuso nel mar Rosso.¹⁰ Se di miniera si trattava, come credo,¹¹ non doveva trattarsi di un sito secondario, visto che della sua localizzazione era rimasta una precisa memoria. La collocazione della stele *anche* a Defenneh potrebbe esser stata determinata dagli interessi che Necho aveva rivolto il suo interesse anche verso l’istmo di Suez, dove si era riproposto di scavare un canale.¹² L’interesse saitico troverà il suo coronamento in età tolemaica.

Notes

1. Petrie 1988, tav. xlvi.
2. Meeks 2003, 70 ss. con bibl. precedente; Phillips 2003, 438.
3. Meeks 2003; Phillips 2003; 1997; Lloyd 1975.
4. Posener 1977.
5. Sidebotham 2011, 8. Le riserve idriche erano un problema costante delle spedizioni che si recavano nel deserto orientale, v. ad es. i provvedimenti presi da Henu nella spedizione allo wadi Hammamat (Couyat e Montet 1912, 81 ss.).
6. Neugebauer 1936, 25.
7. Qualcosa di simile relativo alla stagione delle spedizioni è ricordato nella celebre stele di Harwerra (Sinai 90). In generale sul problema v. Bradbury 1988.
8. Barbour 1961, 42 ss.
9. Manzo 2012. Sulle regioni aurifere v. Klemm e Klemm 2013.
10. Lloyd 1977.
11. Ritengo sicuro che si trattava di una spedizione mineraria, non fosse altro perché una spedizione mercantile, salvo imprevisti, avrebbe posto problemi di tutt’altra natura. Nella riga x + 5 del testo l’espressione “nel monte di Punt” è preceduta da un determinativo che parrebbe essere quello dello scalpello ; non sono capace di integrare la lacuna.
12. V. nota 13. Come è noto, il progetto venne ripreso da Dario, che fece collocare alcune stele presso il canale. Le versioni egiziane sono molto mal conservate, mentre quella in lingua persiana è perfettamente leggibile (DZc, Kent).

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Chapter 3

The scents of Punt (and elsewhere): trade and functions of *sntr* and ‘*ntw* during the Old Kingdom*

Andrés Diego Espinel

This chapter is an overview of the use and acquisition by the Egyptians of two well-known vegetal products from eastern Africa: *sntr* and ‘*ntw*. For the sake of space this survey is limited to the Old Kingdom. The aim of this paper is not to offer new botanical identifications of these terms, or to study their symbolic meanings, but to approach them by studying both the social and cultural context in which they were consumed and the different trade routes and middlemen that the Egyptians used for obtaining them. A study based on traded products can offer interesting insights into their commercial, symbolic, and political meanings.¹ Moreover, it can be an effective approach to profiling better their producing areas and related trade networks.

The present paper includes a significant addition that was not considered in the initial presentation of this material at the seminar. In order to gain a wider perspective on the relevance and meaning of the products under study, the last pages of this chapter will address the different ways in which these products could be administered and distributed by the state as well as by private individuals.

Censing and *aromata* before the Old Kingdom

The use of *aromata* from far southern regions is attested in Egypt from at least as early as the Predynastic Period. For instance, myrrh samples (*Commiphora myrrha*) have been found in the burial of a woman in the “working class” cemetery HK43 at Hierakonpolis (tomb B 333) dated from Naqada IIIB–C.² They were discovered in a bag containing several clay cones that could be imitations of myrrh pellets or drops.³ In the tomb of another woman in the same cemetery and from the same period (tomb B 120), aromatic bark from Burseraceae trees were employed as a protective cover.⁴

Probably, these examples are not unique. Other Predynastic sites, in some instances even older, have provided other resinous materials, but no chemical analysis has yet been done in order to identify them.⁵ Moreover, early incense burners have been discovered at several locations, including two from Ballas.⁶ They probably date from Hendrickx’s Naqada IIIA2–IIIB.⁷

These sparse pieces of evidence point to the use of *aromata* in rituals during this period (its frequency of use is unknown), but at the same time they demonstrate that there were early trade networks that connected Egypt with distant myrrh- and frankincense-producing regions. The procurement of aromatic resins by the Egyptians could follow down-the-line models of exchanges similar, for instance, as found with the obsidian trade.⁸ However, this kind of exchange model,

grounded on different obsidian provenance analyses, has been recently challenged by the so-called “complex networks” formed by more direct and sophisticated circuits. In this model different regional systems intermingle and interconnect very distant nodes.⁹ Although every good had its own flows and chains,¹⁰ *aromata* could circulate following similar paths, boosting analogous trading practices.

Consumption of aromatic resins is also attested during the Early Dynastic Period. The available evidence suggests that it was mainly undertaken by the elites. Fumigation practices are attested in the Palermo annals¹¹ and on a Second Dynasty sealing from Elephantine.¹² Aromatic ointment remains were found in great quantity at the entrance of King Semerkhet’s tomb at Abydos,¹³ and resin, likely incense, was found in the entrance building of the Shunet ez-Zebib enclosure of Khasekhemuy at the same site.¹⁴ Furthermore, texts during this period mention aromatic substances like the aromatic *mrht-* and *hknw*-oils that could be made of *sntr* or ‘ntw, among other ingredients.¹⁵

Sntr

Sntr has been identified with three main groups of trees or bushes. First, it would be the resin of different species of the *Pistacia* genus (Anacardiaceae family). Second, it would be the resin of different species of the Burseraceae and Anacardiaceae families that probably were not differentiated by the ancient Egyptians. In fact, botanists did not split these families until the mid-nineteenth century.¹⁶ Finally, *sntr* could be formed by different mixtures of resins of one or several of these species as the main, but not exclusive, ingredients.¹⁷

Curiously, research on the aromatic resins consumed at Amarna a millennium later than the period under study here indicates that, at least in that moment, *sntr* came from one or several unidentified *Pistacia* species from the Levant, and not from Africa.¹⁸ However, as will be demonstrated below, the latter was the main provider of this resin during the Old Kingdom. Therefore, the Amarna evidence cannot necessarily be extrapolated to other periods. Additionally, the meaning of *sntr* might have changed through time, since it could comprise resins from different plant families or species at the same time; or it could come from different *Pistacia* species or even from the same species but from different areas, such as the *Pistacia khinjuk* Stocks.¹⁹

Sntr has been traditionally considered a causative of the verb *ntr* (*ntr*, “to be divine” → *s.ntr*, “to make divine,” “to make sacred”). However, Christian de Vartavan has recently suggested that *sntr* means literally “scent,” since it could come from the verb *sn/*ssn*, “to smell.”²⁰ A traditional interpretation seems preferable, since the alleged roots of the new etymology are only attested later than *sntr* and with rather different writings. Moreover, the existence of the causative *s.ntr* for “censing” (literally “making divine”) is recorded in the spells 210, 420, and 515 in the *Pyramid Texts*.²¹

The earliest attestations of *sntr*-resin in Egypt date to the mid-Second Dynasty or, more probably, the Third Dynasty.²² From then, the word appears regularly in lists, menus and depictions connected to private mortuary practices. Finally, it was included twice from the mid-Fourth Dynasty in a standard offering list (the so-called Barta’s *Typenlist A*).²³ Such list evolved into a more complex one during the Sixth Dynasty, in which the resin was mentioned three different times.²⁴

Few attestations, mainly from the Abusir papyri, indicate that *sntr* and censing practices were also employed in divine and royal cults²⁵ and in festivals.²⁶ These papyri, written in the Fifth and Sixth Dynasties, mention, for instance, pellets of *sntr* among the tools for the regular cult in royal mortuary complexes. According to these documents, the resin was a very precious substance that, quoting Posener-Kriéger, was consumed “parsimoniously” and in an “almost symbolic way.”²⁷ The papyri and some reliefs make mention of the storing of *sntr* in different boxes, generally small (*hnw*, [*mjhmt*, *fdt*]),²⁸ or in small bags.²⁹ At least in one instance, the same pellet was used in the same fumigation ritual over several days.³⁰ In another case, a pellet was lost or, maybe, stolen, and it was not replaced by a new one in subsequent days.³¹ As will be seen below, the papyri are also an important source for the study of the managing and distribution of the *sntr* that, as other *aromata*, was virtually monopolized by the state.

The Abusir papyri, along with abundant iconographic and archaeological data, record the way incense was consumed by the Egyptians. It was burned in *k3p*-censers.³² These were made of pottery, stone, or “Asiatic copper (*šty*).” As noted above, *sntr* was burned as single *p*- or, alternatively, *p3d*-pellets; the state of these were carefully recorded in the papyri mentioning “voids (*wšt*)”³³ or that they were “very small (*iwf nds wrt*).”³⁴ Such descriptions do not seem to correspond to the way in which incenses are employed currently. Consequently, different interpretations for these expressions have been recently proposed.³⁵ For instance, some discoveries at the temple of Senwosret III at Abydos have led to Willems to posit that *p*-pellets of *sntr* were, in fact, clay balls recovered with that substance.³⁶ That interpretation is tempting, but bearing in mind that no similar parallels of this hypothetical practice exist today, it should be taken with caution. Perhaps the “*wšt*-voids” may express the extraction of clumps of *sntr* from the original *sntr*-ball for consumption. This could explain the expression *sy gs=f*, “reaching its half” that is attested in one record.³⁷ Moreover, the traditional interpretation of spherical balls of *sntr* parallels Graeco-Roman papyri that record spherical- and tablet-shaped ingots of incense as the usual way of storing the resin.³⁸

Different spells of the *Pyramid Texts* offer interesting insights on the functions of the *sntr*. For instance, the king is “censed (*s.ntr*)” in spells 210, 420 and 515, as stated above. Censing the king with “dried *sntr* (*sntr wšr*)” protected him against the evil influences of Seth in spell 29.³⁹ Moreover, *sntr* enhanced the contact between the pharaoh and the gods in spells 269 and 684.⁴⁰ Another passage of spell 269 could connect the *sntr* “pellet (*p3d*)” with Horus’ “kneecap (*p3d*),” maybe because of their rounded shape.⁴¹

As many authors have already pointed out,⁴² the *Pyramid Texts* suggest that the main provider of *sntr* during the Old Kingdom was Nubia. Spells 437, 483, and 610 mention that god Deduen brought it from Ta-Sety for the cult of gods.⁴³ Ta-Sety is a generic name for the Nubian region, and the Egyptian southern border area, too. These religious references could mirror an historical reality. The Nubian provenance of *sntr* is suggested by other evidence. Alleged incense burners are attested in “royal” A-Group tombs in Lower Nubia at the end of the fourth millennium BCE.⁴⁴ Censing practices are infrequently attested in coeval royal Protodynastic tombs in Egypt, however.⁴⁵ Much later, several biographical texts of the mid-Sixth Dynasty mention the bringing of *sntr* from different Nubian regions. Herkhuf placed the *sntr* as the first product he brought from Yam, in Upper Nubia,⁴⁶ and Sabni, when returning from other expedition to Lower Nubia, sent heaps of *sntr* along with an elephant tusk to the pharaoh.⁴⁷ Curiously, this official possibly got these products by exchanging them for some Egyptian goods in which another *aromata*, the *mrht*-oil, was included. During the First Intermediate Period, Nubia still was considered a provider of the resin, according to a biographical text in the tomb of Setka from the beginning of the Ninth/Tenth Dynasty.⁴⁸

There is no Old Kingdom evidence on the import of *sntr* from either Punt or the Levant. Yet, there are several private funerary domains and a relief that suggest that it was also produced, even though rarely, in Egypt.⁴⁹

‘ntw, ‘ndw and mdt

Unlike *sntr*, which was tightly connected to Nubia, ‘ntw is explicitly related to Punt, even though its oldest attestations do not mention their precise provenance.⁵⁰ The botanical identification of ‘ntw is, again, problematic, but probably included lesser genera than the *sntr*. It could comprise some species of the genus *Commiphora*, and, maybe, of the genera *Boswellia*, and *Canarium*. Later evidences even suggest other species from other different families.⁵¹

The etymology of ‘ntw is unknown, and it could be a loan word.⁵² It has been usually connected to ‘ndw,⁵³ another product from Punt that could be a synonym⁵⁴ or a variant.⁵⁵ The Egyptians sometimes placed the term in relation to ‘nt, a word that means either “nail” or “a kind of adze.” For instance, in spell 318 of the *Pyramid Texts* the king receives “fingernails of ‘ntw, ‘ntw in the fingernails (*n.wt m ‘ntw ‘ntw m ‘n.wt*).”⁵⁶ This connection, considered a pun because of the phonetic similarity between both terms, was probably inspired by other reasons too.⁵⁷ Among other uses, the ‘nt-adze served for extracting the resin from the ‘ndw-trees, as it is evident in two reliefs related to a Punt

expedition in the causeway of Sahure's mortuary temple (reliefs SC/south/2003/07 and 06).⁵⁸ The Egyptians could have considered both the 'ndw- and 'ntw-trees tightly related because of their phonetic similarity and, above all, common provenance. Consequently, they could assign to the latter product some aspects related to the former, despite they were probably different species. Actually, the use of the 'nt-adze may be a hint for identifying the 'ndw-tree as a species of the *Boswellia* genus trees.⁵⁹ For instance, some tapping tools, called *mingaf* or *sonke*,⁶⁰ in the form of knives, chisel-like tools, or, less frequently, adzes are employed today in Ethiopia and Sudan. They serve for wounding the branches and bark. This practice is mainly performed on *Boswellia* trees.⁶¹ Myrrh harvesting is usually done by collecting natural or accidental exudations from *Commiphora* specimens,⁶² but they can be occasionally tapped too.⁶³ In the same line, el-Awady has noted that the resin in Sahure's scene is yellowish-brown (like *Boswellia* frankincense) and not red (like *Commiphora* myrrh), as from Hatshepsut's 'ntw-trees at Deir el-Bahri.⁶⁴ Both facts could substantiate the idea that 'ndw was different from 'ntw, despite their phonetic proximity.

'ntw is attested for the first time on a scene from the lower temple of the rhomboidal pyramid of Snefru at Dahshur. The relief is captioned as "seeing the growing of the living cypresses and the living 'ntw-trees (*m³ ird š.w w³d 'ntw.w w³d*)."⁶⁵ According to this text the Egyptians either transplanted 'ntw-trees in Egypt from an 'ntw-producing land, or, having in mind the mention of the verb *ird*, they succeed in cultivating 'ntw-seeds in Egypt. Either of these possibilities suggests relations between Egypt and Punt, and the former would imply direct contacts between both regions.

A recent discovery at Dashur could suggest that 'ntw-trees were actually transplanted in Egypt during this reign. A mud-brick structure built prior to the valley temple of the rhomboidal pyramid had a garden in which, at least, palm trees, sycomores, and cypresses (as the ones mentioned in Snefru's scene) were cultivated. No possible 'ntw-trees have been identified so far, however.⁶⁶

Other evidence suggests trade contacts between Egypt and Punt under Snefru. Some funerary lists from the Third Dynasty and the early Fourth Dynasty mention two other substances that could come from Punt as well: 'nd(*n*)t (maybe an early writing of 'ndw?),⁶⁷ and *hs³yt* (a substance that was recorded already in the Third Dynasty).⁶⁸ From then, and contrarily to *sntr*, all these substances are mentioned by Old Kingdom documents on rare occasions. With respect to 'ntw and 'ndw, later mortuary lists and rituals did not include them, and they are seldom mentioned in the *Pyramid Texts*. For instance, other than the aforementioned reference in spell 318, it is mentioned along with *sntr* in spell 347: "the mouth of the king is *sntr* and the lips of the king are 'ntw (*r³ n N m sntr šp.ty <n> N m 'ntw*)."⁶⁹ Leaving aside a dubious attestation, they are not recorded in the Abusir papyri, either.⁷⁰

All of these circumstances point to the likelihood that 'ntw- and 'ndw-resins were not imported regularly to Egypt; actually, contacts between Egypt and Punt were always sporadic. Therefore, they were considered by the Egyptians as extremely rare and precious materials, the supply of which was too erratic as to be linked to ordinary rituals or ceremonies. This appreciation of both resins as goods provided by unpredictable supplying rhythms could explain the appearance of the *mdt*-ointment by the Fifth Dynasty.⁷¹ This item could serve as a succedaneum for 'ntw. According to later evidence, the unguent was made with second-quality 'ntw mixed with, among other ingredients, animal fats.⁷² It is not possible to know if it was so during the Old Kingdom, however. In any case, the appearance of the unguent does coincide with a period in which contacts between Egypt and Punt took place.

Again, the etymology of *mdt* is unknown. It could be a shortened name of an older oil called "oil of first quality which fills (the heart of) the body (*tpy h³t mh [ib] dt*)."⁷³ Or it could be a loan word. Tákács, who omits that possible etymology, records similar Arab and Ge'ez words meaning "styrax" or "myrrh oil."⁷⁴

In summary, the creation of the *mdt* could serve as a means of saving the consumption of the 'ntw by means of an "adulterated" substitute in the form of an aromatic ointment: diluting the supply as to maintain its availability. According to different data, it was tightly connected with royal ceremonies as the *sed*-festival, and it was included in several spells of the *Pyramid Texts* and in some temple inventories, possibly in connection with royal and divine cults.⁷⁵ Significantly, it is not attested in private contexts.

Despite of its rarity, during the second half of the Old Kingdom there is evidence that distribution of ‘*ntw*, and more rarely ‘*ndw*, spread from the capital and royal court to the provinces. ‘*ntw*, along with other *aromata* and unguents, could have formed part of the royal rewards given to successful officials both in the court and in the provinces, as in the New Kingdom.⁷⁶ For instance, the king rewarded or paid the governor of Elephantine, Sabni, son of Mekhu, with an ‘*fdt*-chest containing ‘*ntw* and *mrht*-unguent, along with the gold of honor.⁷⁷ Furthermore, according to a biographical inscription, King Isesi rewarded Sennedjemib-Inti by anointing (*wrht*) him with ‘*ndw*,⁷⁸ a material that surely was imported from Punt by the king, who sent an expedition to that region, according to later evidence.⁷⁹ Such practices probably fostered an ever-growing distribution of exotica to the elites and the provincial governors during the Old Kingdom, as it is also detected, for instance, in the distribution of Levantine potteries out of Memphis, mainly in elite contexts.⁸⁰ For instance, during the Fourth and Fifth Dynasties, the distribution of ‘*ntw* was apparently restricted to the Memphite necropolis (Saqqara, Giza, Meidum) and to an isolated attestation at el-Hammamiya (Fifth Dynasty).⁸¹ During the Sixth Dynasty, mentions of this resin increased in private tombs in the provinces (Sharuna, Meir, el-Hawawish, Naga ed-Deir, el Qasr wal-Saiyad, and Qubbet el-Hawa).⁸² Admittedly, these pieces of evidence could be equally interpreted as a result of the ever-growing number of decorated tombs in the provinces at this time, however.

The resin continued to be imported during the late Old Kingdom and First Intermediate Period. An inventory list from Coptos mentions it along with natron and, possibly, *sntr*,⁸³ and a brief biographic text of Setka at Qubbet el-Hawa (tomb QH 110) mentions inexplicably that this official brought ‘*ntw* from Byblos (?), suggesting expanded trade routes.⁸⁴ Among the tools listed in the Coptos inventory there is a mention to ‘-*m-h̄t*-burners (lit. “arm for burning”),⁸⁵ pointing to new changes in the way the *aromata* were used in rituals and that probably started in the late Old Kingdom.⁸⁶

According to the scant evidence, both ‘*ntw* and ‘*ndw* were not clearly imported from any other region than Punt. The reliefs recently discovered in the causeway of Sahure’s mortuary complex record the bringing of ‘*ndw* trees to Egypt.⁸⁷ On the other hand, the attestation in the Palermo stone of an expedition in the last year of Sahure’s reign is somewhat different, despite that both attestations probably record the same event. The annals mention the bringing of ‘*ntw* instead of ‘*ndw*, along with *nwd*-ointment, and they seem to omit the import of ‘*ntw*- or ‘*ndw*-trees.⁸⁸

Contrarily to *sntr*, these resins were never successfully produced in Egypt, even though Egyptians tried to transplant these resinous trees in the Nile Valley in order to obtain their own *aromata*. Other than the aforementioned relief in the temple of Snefru at Dashur, the best evidence on this came from Sahure’s reliefs. They record the transplantation of ‘*ndw*-trees in Egypt – possibly at a royal palace beside the royal mortuary complex.⁸⁹ Moreover, these scenes underline the symbolic importance of the trees, as they are the central motif of two outstanding iconographic compositions.

Baboons, grivets, and dogs

Finally, despite their importance, ‘*ntw*, ‘*ndw*, and related materials are not the only evidence for tracking contacts between Egypt and Punt during the Old Kingdom. Trade with far regions of Africa and, above all, with Punt also meant the import of other products. That could be the case of the aforementioned *hs’yt*, also obtained from Nubia, or the obsidian from Eastern Africa and Yemen.⁹⁰ Here, however, brief reference to other products that have been overlooked by many researchers is included for context. Even though they are not plants, they merit reference in this study, as they underscore the ideas on the import of vegetal products from southern areas.

Leaving aside their crews, the ships coming from Punt in the reliefs of Sahure do not bring aromatic products and their producing trees, but dogs and monkeys. These animals recall later lists and depictions of Punt products.⁹¹ Three kinds of monkeys, in addition to *tsm*-dogs and felines, are mentioned or depicted: the hamadryas baboon (*Papio hamadryas hamadryas*) (Egyptian, *i’n*), the grivet (*Cercopithecus aethiops*) (Egyptian, *gf*),⁹² and the olive/Anubis baboon (*Papio hamadryas*

anubis) (Egyptian, ‘nr).⁹³ Unlike grivets, Anubis and hamadryas baboons could have been still indigenous to the Egyptian deserts by the beginning of the Early Dynastic Period.⁹⁴

Today, the geographical distribution of grivets superposes on the areas in which hamadryas and Anubis baboons live, even though each of them needs a different kind of habitat.⁹⁵ Actual remains of Anubis baboon and, more significantly, grivets are attested in Hierakonpolis in the earliest stages of the Naqada culture (Naqada II).⁹⁶ Moreover, baboon figures are common in the Early Dynastic period. However, images of baboons and grivets became rarer during the Second and Third Dynasties. They reappeared meaningfully in the reign of Snefru, at the same time as ‘ntw. These animals were depicted in many later and different monuments suggesting that they could be exotica acquired through the contacts with Punt or, at least, through the trade between Egypt and their southern neighbors via Nubia, the Eastern Desert, or the Red Sea. In this sense, a relief from the mastaba of Itet at the cemetery of Meidum is significant (Copenhagen, Ny Carlsberg Glyptotek AEIN 1133A⁹⁷). It depicts a row of different animals and a boy. The first animal is a common crane (*Grus grus*), the tail of which is taken by a grivet. Behind it, a boy (or dwarf) puts a hand on its back while his other hand is held by a hamadryas (?)baboon. Grivet and baboon could be consciously depicted here as southern imports, mainly from Punt, along with the common crane, as many groups of this migrant bird pass through the Nile Delta to winter in Sudan, Ethiopia, and Eritrea.⁹⁸ Finally, if the human figure is a dwarf,⁹⁹ all of them would form a group of beings that come from the east/south. This interpretation does not fit well with their placement in the tomb, however, as they are oriented southward on the western wall of the chapel.

The habitat of hamadryas and Anubis baboons and grivets is nowadays roughly coincident with the African and, in regard to Hamadryas baboons, Arabian myrrh- and frankincense-producing regions.¹⁰⁰ Of course, as has been stated above, the distribution of these animals could have been different during the Old Kingdom, but that they were included in the aforementioned lists and aboard Sahure’s ships suggest that they were implicitly considered as distinctive imports from Punt.

Finally, *tsm*-dogs were also imported from Punt, according to Sahure’s scene and later lists of products from the region. Some Old Kingdom “dogs’ names” could come from ancient African loan words. That is the case of *inhb*, *ikni* or *iknht*.¹⁰¹ For instance, the last two names could be connected to Proto-Omotic **kan* (#k-n), “dog.”¹⁰² However, since it is not possible to know what language was spoken in Punt more than 4000 years ago, any presumption on this matter should be considered carefully.

Curiously, symbolic roles, economic significance and practical uses of grivets, baboons, and dogs seem marginal during the Old Kingdom. Grivets and dogs were predominantly exhibited in mastabas as cherished pets, and they could be considered by their owners as status symbols,¹⁰³ even though they are not mentioned explicitly as royal rewards or exotic goods. They were frequently depicted along with dwarfs,¹⁰⁴ who could recall vaguely the land of Punt.¹⁰⁵ On the other hand, dogs were employed in hunting and, along with baboons, in surveillance activities.¹⁰⁶

Other imports from Punt could be leopards (*Panthera pardus*) and cheetahs (*Acynonix jubatus*).¹⁰⁷ During the early Fourth Dynasty spotted skins were massively introduced in private and royal funerary cult scenes, even though they are also attested in earlier documents.¹⁰⁸ This trend could mirror the increasing need for these garments in Egypt. After the First Dynasty, the leopard only reappears in the early Fourth Dynasty in the mastaba of Nefermaat, depicted as a tamed(?) leopard.¹⁰⁹ Even though the geographical distribution of leopards and cheetahs was probably much wider in the past and, no doubt, comprised Egypt,¹¹⁰ the demand for felid skins for ritual purposes could imply the import of animals from different African regions. Leopard/cheetah garments are mentioned in several Old Kingdom documents, mainly from the Fourth Dynasty, and they were included in the list of exotica brought by Harkhuf from the south.¹¹¹ Moreover, they formed part of the attire of pharaoh’s *ka* according to the *Pyramid Texts*,¹¹² and sometimes they could be included among private funerary equipment.¹¹³

Leopards were extremely unusual in the decoration of private tombs. In addition to Nefermaat’s example, a relief from the mastaba of Nyankhnyut (late Fifth Dynasty) depicts a leopard among the “pets” of the tomb owner, along with a dwarf, a monkey and two dogs.¹¹⁴ Again, the whole group of

animals and dwarf may faintly suggest the southern provenance of all of them or, at least, a symbolic connection to Punt. Moreover, a possible leopard (or lioness) and a lion inside two cages were depicted virtually at the same time in the tomb of Ptahhetep (II)/Tjefi. In this case, however, both felids would have been hunted in the surrounding areas of the Egyptian Nile Valley, as they are presented to the tomb owner along with other wild animals hunted in the desert hinterland.¹¹⁵

Official and private distribution of *aromata* during the Old Kingdom

It is not possible to propose a detailed and definite scheme to explain the way the different *aromata* were administered and distributed by the state or, alternatively, by private entrepreneurs. Evidence is circumstantial and incomplete. Delivery, acquisition, and storage of these items are glimpsed through a scattered group of titles, administrative records, and archaeological evidence. In order to offer a wider range of possible interpretations, attestations on other *aromata*, such as *mrht-* and *hknw*-oils or *nwd*-perfumes for instance, have been considered. Consequently, bearing in mind the long duration of the Old Kingdom and the missing data, the resulting conclusions have to be considered with due care.

The management of *sntr* is better documented than that of '*ntw*'. Even though documents are not clear about their distribution, central institutions apparently supplied *sntr* and other *aromata* to different officials and temples.¹¹⁶ As was the case with similar products, *sntr* was occasionally given by the king as royal reward or offering to the main officials.¹¹⁷ This suggests that its regular and abundant attestations in the private offering lists for the mortuary cults would be almost symbolic in some cases or, at least, as will be seen in the case of the Abusir papyri, they would imply minimal consumption.

No administrative titles refer specifically to the managing and procurement of *sntr*. However, some of them, along with other information, offer interesting clues as to the way the court and other official institutions administered similar *aromata*. Unlike basic products that probably form part of a self-regulated economic system,¹¹⁸ *sntr* was probably monopolized and distributed, at least initially, by the state, as were other foreign and expensive products. Archaeological and textual information on the distribution and obtainment of aromatic resins in Egypt during the third millennium mainly comes from the official milieu. As stated above, *sntr* and '*ntw/ndw*' were mostly obtained by means of official expeditions to foreign countries. Only in one instance, at the end of the Sixth Dynasty, it was reportedly acquired by a private entrepreneur, Mekhu's son, Sabni, from Nubia. In any case he delivered part of his products to the "Residence (*hnw*)."¹¹⁹ From this institution, that probably was the main governmental building complex,¹²⁰ the resin would be probably redistributed to other official institutions such as royal mortuary and sun temples.

Sabni's expedition suggests that exotica could penetrate the society by alternative paths. For instance, some private funerary domains and depictions point to the existence of local – and non-royal – sources of provision of *sntr*. In addition to these local means of procurement, connected to wealthy potentates, there were other alternative private circuits that are not clearly perceptible in the Old Kingdom.¹²⁰ Private entrepreneurs, markets and foreign and Egyptian traders and middlemen could introduce *aromata* into the private sphere. Foreign items in some provincial tombs suggest that exotic products, or at least the vases that once contained them, percolated to lower classes of the Egyptian society.¹²¹ The widespread presence of *sntr* in funerary and cultic rituals all over Egypt could both demand and create alternative supplying networks. Generally speaking, however, other items related to Punt were apparently retained by the court and the elites. For instance, '*ntw*' and '*ndw*' are extremely rare in Old Kingdom records, and '*ntw*' mostly appears in tombs of the highest officials in the capital and the provinces. Moreover, exotic animals such as grivets, dogs, and felids are only depicted as part of the possessions of the wealthiest officials in their mastabas, leaving aside the baboons that served as "K9 agents" in some market scenes. Curiously enough, there is no explicit evidence on the use of these animals in the royal milieu.

Other than the procurement of *aromata* by means of complex and expensive royal expeditions abroad, there were two different angles derived from the *aromata* that the state probably controlled or, at least, tried to take up: their elaboration and subsequent distribution.¹²² The first aspect is attested in

the textual record by few titles held by a reduced group of officials. The most significant evidence come from some reused relief fragments at Saqqara. They mention several titles related to the “royal perfumers (*mdhw ny-swt nwd*)” Isebu and Ptahshepses, who could be the same person (Fifth/Sixth Dynasties).¹²³ The title *mdhw ny-swt nwd* is no doubt related to *nwd(y?)* that, in some instances, can be considered a reference to other group of perfumers.¹²⁴ Both Isebu and Ptahshepses, and possibly their sons,¹²⁵ held several titles in charge of this professional group (*s hd nwd[y.w?], imy-ht nwd[y.w?]*).¹²⁶

Evidence of the distribution and management of the *aromata* is somewhat richer. Some of the aforementioned titles, mainly from the late Fifth and Sixth Dynasties, meaningfully relate *nwd* to the “royal ornaments (*hkr[w] ny-swt*),” either as a material or as an office.¹²⁷ The “royal ornaments” comprised the dresses, jewels, *aromata*, and other regalia related to the care and attire of the royal body.¹²⁸ According to some epithets, “royal ornaments” were imported from foreign countries.¹²⁹ Therefore, this expression would comprise, generally speaking, precious and highly esteemed goods tightly connected to the royal use and consumption.¹³⁰ Actually, they were possibly kept in close connection to gold.¹³¹

The title “custodian of the perfume in the chamber of the royal ornaments (*iry-ht nwd iz hkr-ny-swt*)” held by Ankhkakai (Fifth/Sixth Dynasties) suggests that the *aromata* were kept in a single chamber.¹³² However, the highest officials connected to the royal ornaments held the title “overseer of the two chambers of the royal ornaments (*imy-r is.wy hkr[w] ny-swt*).”¹³³ Moreover, two Sixth Dynasty epigraphs mention the division in “two chambers of the royal ornaments (*iz.wy n hkr ny-swt*).”¹³⁴

In addition to Ankhkakai’s title, *nwd/nwd.w*, is sometimes related to other institutions in which *aromata* were possibly kept. For instance, the aforementioned Ptahshepses was “overseer of the perfume and the *izb-* and *stī-hb*-oils in the southern palace (*imy-r nwd ibz st i-hb m ‘h-śm'y*),”¹³⁵ and Isebu was “overseer of the perfume in the two houses/two chambers? (*imy-r nwd m pr.wy/iz.wy?*).”¹³⁶ Some titles related to the management of the *mrht*-oil suggest similar connections. For instance, both inscriptions of Kaipure (Fifth Dynasty) and Neferennesut-Snefru (Sixth Dynasty) refer to “the *mrht*-oil from the two chambers (*mrht m is.wy*)” delivered by the Residence.¹³⁷ According to several titles, *mrht*-oil was also connected to the “Great House (*pr-3*)” and/or to the “royal ornaments.”¹³⁸ For instance, Nemtynefer (Fifth Dynasty) was “overseer of the *mrht*-oil of the royal ornaments (*imy-r mrht nt hkr[w] ny-swt*),”¹³⁹ and Neferiryptah (Fifth Dynasty) was “keeper of the *mrht*-oil of the royal ornaments of the Great House (*iry mrht hkr[w] ny-swt pr-3*).”¹⁴⁰

As a whole, *nwd* and *mrht*-oil were related to the royal ornaments, the two chambers, and/or the great house. *Aromata*, therefore, were kept – and possibly produced – in the royal palace and/or governmental buildings. Oils and perfumes and, consequently, other *aromata* were probably administered by the “Treasure (*pr-hd*).” For instance, an inscription mentions “*mrht*-oil coming from the Double Treasury (*mrht m pr.wy-hd*).”¹⁴¹ Moreover, the Treasury is connected to the “royal ornaments” in the title “overseer of the house of the royal ornaments of the double treasury (*imy-r pr hkr.w ny-swt pr.wy nbw*).”¹⁴² This title and other ones held by different viziers and officials reinforce the existence of administrative links between the “royal ornaments” and the Treasury.¹⁴³ *Aromata* could be also kept in other departments too. A papyrus from Abusir mentions the “royal private apartment(s)/harem together with the house of the *mrht*-oil (*ipt ny-swt iwn pr mrht*)” as part of the Residence.¹⁴⁴

In some instances materials created or kept in the aforementioned departments or administrative sections permeated other spheres. Different seals, papyrus, and epigraphs suggest that *aromata* came out from the central government and/or royal court to other institutions and persons. Royal sealings illustrate vaguely the flow of some goods from palace to temple. For instance, a seal of Niuserre discovered in the temple of Reneferef mentions a “scribe of the royal ornaments (*sš hkr ny-swt*)” in connection to other titles related to the Great House.¹⁴⁵ This seal suggests the provision of the temple with precious things from the royal estate. The same applies, for instance, to another sealing of the same king from the same temple that records an “overseer of the gold of the Great House (*imy-r pr*

nbw pr-³)”¹⁴⁶ or, more significantly, another seal from the temple that seems to mention the *snTr* or the action of censing (*s.ntr*) probably connected to the priests of the sun temple of Neferirkare.¹⁴⁷

The papyri of Abusir offer more precise clues on the way *aromata* were distributed. For instance, *mrht*-oil was given to the temple of Neferirkare from the Treasury, possibly as a *b3s*-vase daily.¹⁴⁸ Sun temples were other important distributive centers,¹⁴⁹ but there are no attestations of the delivery of *aromata* from them. Mortuary temples also played a role, possibly by exchanging or delivering goods previously provided by other institutions. In one instance, possibly during the reign of Unas,¹⁵⁰ the “magazine (*pr-šn’*)” of Neferirkare’s sun temple delivered a *htmt*-box of *sntr*.¹⁵¹ One day later, Neferirkare’s mortuary temple delivered, among other goods, three *fdt*-boxes of *sntr* to a “washerman (*rhy*)” who possibly used the resin for cleaning or perfuming dresses, probably in connection to the rituals performed in the temple.¹⁵² In another instance, an unknown institution offered to the temple of Reneferef several *aromata* as different jars of *mrht*-oil and 60 bags of *sntr* kept in two wooden *hnw*-chest and three wooden *htmt*-chests.¹⁵³ In the same papyrus the “administrative department (*gs-pr*)” of the mortuary temple of Niuserre also delivered three other kinds of oil to Reneferef temple in different vessels and vases.¹⁵⁴

Some epigraphs in several Memphite mastabas point to the distribution of *aromata* – along with other precious products – as royal rewards or gifts. Several of them mention *htp di-ny-swt* offerings from the Residence. In two aforementioned examples of the Fifth and Sixth Dynasties, for instance, *mrht*-oil was delivered from the “two chambers.”¹⁵⁵ Similarly, Mereruka (Sixth Dynasty) received several *luxuria* from the Residence as *htp di-ny-swt* offerings. They included *sft*-, *mrht*-, *hknw*-, and *stl-hb*-oils (Room C4).¹⁵⁶ The same applies in the case of his predecessors Kagemni (Room VIII)¹⁵⁷ or Nikauisesi (Room IV).¹⁵⁸ In the case of the latter, *sntr* is explicitly mentioned as part of the royal offerings, but, contrary to Mereruka or Kagemni, the epigraphs do not specify if it was delivered from the Residence or from a more precise department.¹⁵⁹

Yet, some late Fifth and Sixth Dynasty market scenes in several Memphite tombs show that *aromata* such as *mrht*- and *stl*-oils could be obtained by means of private exchanges.¹⁶⁰ Moreover, *mrht*-oil served, among other goods, to Hetepherakhty at Saqqara (Fifth Dynasty) and Sennedjesui at Dendera (First Intermediate Period) as payment to the people involved in the building of their tombs.¹⁶¹ This evidence points to possible private networks for acquiring the products from Punt and other exotica. Despite of this evidence, *sntr* and, above all, ‘ntw and ‘ndw were obtained mainly by means of royal expeditions sent to Punt and Nubia. The latter resins are rarely mentioned in private contexts. They are exhibited in tomb reliefs as status symbols because they were probably regarded as both royal gifts and effective symbols of regeneration.¹⁶² In any case, these materials, and above all *sntr*, probably flowed by private exchange networks to lower classes. The vase for ‘ntw from a tomb at Naga ed-Deir could be an isolated example for this kind of resin (it could have been empty for a long time before it was put in the funerary chamber, however).¹⁶³ Evidence on *sntr* is rather rich, but it offers two possible interpretative scenarios. It is frequently attested in many funerary lists and in depictions of priests censing with it. These examples suggest that there was an important demand for this material of which private entrepreneurs could take advantage. However, the few explicit mentions in the Abusir papyri of the quantity of resin consumed suggest it was consumed slowly. As stated above, this leads to the probability that its frequent attestations would be symbolic or refer to the use of minimal quantities of this substance.

Finally, there is no clear evidence of the management and distribution of wild animals imported from abroad in the Old Kingdom, which might mirror the distribution of plant materials from those regions. Sahure’s bears (*Ursus arctos syriacus*) in the so-called “Syrian tribute” scene from his temple,¹⁶⁴ and the dogs and baboons from Punt in the same monument are the most prominent attestations of the acquisition of exotic animals.¹⁶⁵ There are no titles connected to such activity or to the maintenance of the animals in the court. The titles “keeper of baboons (*mniw ‘nr[w]*)” and “custodian of grivets (*iry gf[w]*)” are only attested in private contexts, the former, for instance, being attested in a market scene.¹⁶⁶ The same can be said on the management of animal skins. Only an official, Kaiwedjaw, was “overseer of the two chambers of the pelts/hides (*imy-r is.wy b3.wt*).”¹⁶⁷ Since this official also held titles connected to leatherwork, it is difficult to determine if he was

connected directly to the management of exotic furs, or animal products in general. According to Brovarski, the term “pelt (*b3t*)” would refer to skins of wild animals and, accordingly, this official would be in charge of the care and production of furs for making royal garments, as he also held some titles connected to the dress and personal care of the king.¹⁶⁸ Moreover, the Abusir papyri do not offer any reference on these goods that appear only sporadically in private mortuary lists.

The delivery channels of wild animals and their furs to the elites were possibly similar to the ways in which the *aromata* flowed to the elites and other groups. Sabni announced to the king that his father had obtained a big lion skin in Nubia. It is feasible that this item was given to the king along with *sntr* and an ivory tusk that are clearly mentioned as products sent to the Residence. A plausible gift to the king of a lion skin by this official could be another example, in all these instances in reverse, of the royal distribution of animals to the officials. The same can be said about the presence of leopard teeth in an elite area at Heit el-Ghurab.¹⁶⁹ Involvement in official expeditions could lead to the acquisition, by royal permission or by private interest, of exotica. Several Levantine jars in the mastaba of Weni at Abydos (Sixth Dynasty) are telling evidence of this possible means of acquisition.¹⁷⁰ The presence of a *gf*-grivet in the tomb of the official Kainefer (Fourth/Fifth Dynasties) could be another example.¹⁷¹ According to fresh evidence from Sahure’s causeway, Kainefer’s son, Kaiswedja, was one of the leaders of the expedition sent by the king to Punt.¹⁷² Consequently, Kainefer’s grivet could be related to that expedition or, maybe, to other unknown ones led by Kaiswedja or even by Kainefer himself, since he was also an expedition leader.

Conclusion: *sntr* and *ontw* in context – reasons and circumstances

At this point, it is necessary to suggest why Egypt met Punt during the Old Kingdom. Of course, any explanation on this matter is extremely tentative. The appearance of *sntr* and ‘*ntw* in Egypt coincided with a transitional period in which ideology, administration, or religious practices, among other circumstances, changed significantly. For instance, during the Third Dynasty – which was a relatively short period – and the beginning of the Fourth Dynasty, mainly during the reign of Snefru, mortuary ceremonies and implements changed and new elements were incorporated.¹⁷³ As it has been stated, both *aromata*, along with incense burners, for instance, formed part of these innovations.

Rearrangements of the standards for many different practices were probably conceived by the central government in order to strengthen and centralize the state. No doubt, the inclusion of aromatic resins in religious practices, along with other exotic materials such as leopard skins or obsidian, meant the search by the central government for foreign materials and, consequently, for new trade routes and commercial partners. It also implied that the state, which probably monopolized these items, became their main deliverer to the elites.

With little doubt, the supply of *sntr* through Nubia and even through local production was more successful than that of ‘*ntw* and/or ‘*ndw*, which came exclusively from Punt. The former was employed frequently but not generously, and it was included in regular rituals and ceremonies. The latter ones, however, were considered more prestigious because of their provenance and rarity, even though they did not appear to form part of those rituals regularly. According to the available evidence, these goods were especially obtained and distributed by the state to the elites. The frequent mention of *sntr* in tombs and temples as part of ritual and cultic practices, in addition to other attestations, could suggest, among other possibilities, that the resin was purveyed by non-royal agents.

Finally, the acquisition of the resins resulted in the import into Egypt of other vegetal and animal exotica that, again, were mainly dispensed among the central and provincial elites, even though it is very plausible that alternative, decentralized ways of distribution might have existed. The precise uses and provenance of these goods are, however, less clear. Texts do not mention clearly the possible uses of many of these items or, for instance, how often they were necessary in ritual practices. Moreover, they could have entered Egypt through different regions, and indeed, some of them could have already been present in areas close to the Egyptian Nile Valley.

Notes

1. See Manzo 2011.
2. See *Hierakonopolis Online*, n.d.
3. Friedman 2003; Baeten *et al.* 2015.
4. Gale and Friedman 2001.
5. Roy 2011, 252; Jones *et al.* 2014.
6. Podzorski 2003.
7. Dates taken from Hendrickx 2006, 92, tab. II.1.7.
8. Renfrew *et al.* 1968.
9. Ibáñez *et al.* 2015.
10. Earle 2009, 210.
11. Wilkinson 2000, 97–98, no. PS r.II.6.
12. Pätznick 2005, 64–66, 374, no. 203.
13. Morris 2007, 16–17.
14. Bestock 2009, 52.
15. Kaplony 1963a, 301–302, 309; Kaplony 1963b, 1012, n. 1626; Kahl 2003, 190–192; 2004, 330. A sample of *Commiphora* sp. is reported to come from Netjererkhet's mortuary complex (Dee 2010, 210). Unfortunately, the archaeological context of the finding and a more precise botanical identification are not reported.
16. Baum 1994.
17. de Vartavan 2007.
18. Serpico and White 2000.
19. De Vartavan 2007, 65–71.
20. de Vartavan 2010.
21. Allen 2013a, PT 210, 4 = 127a; 2013b, PT 420, 1 = 750a; 2013c, PT 515, 15 = 1181b.
22. E.g. Kaplony 1963a, 340, 352–354; Köhler and Jones 2009, 42–43, 56.
23. Hassan 1948, 93, 170–174; Barta 1963, 72–76, 181, fig. 4.
24. Hassan 1948, 185–186; Barta 1963, 78–79, 182, fig. 5.
25. Posener-Kriéger 1976, 52–54, 61–62, 552; Vymazalová and Coppens 2011, 787, 795, no. vi.
26. Rummel 2006; Coppens and Vymazalová 2010, 94.
27. Posener-Kriéger 1976, 175–176, B10; see also Willems 2012.
28. Posener-Kriéger 1976, 20, 185, B31; Brovarski 1999, 29–30, 31, 35–36.
29. Posener-Kriéger *et al.* 2006, 52, 227, pl 14; Kanawati and Abder-Raziq 2000, pl. 64.
30. Posener Kriéger 1976, 175; Posener-Krieger *et al.* 2006, 92, 251, pl. 34.
31. Posener-Kriéger 1976, 128–129, 134, fig. 3, no. 20–21.
32. Balcz 1933, 211–214; Posener-Kriéger 1976, 182, B22; Bolshakov 2005, 85–86, n. oo, fig. 5.9; Posener-Kriéger *et al.* 2006, 94, 253, pl. 35.
33. Posener-Kriéger 1976, 196, fig. 3, no. 20–21.
34. Posener-Kriéger *et al.* 2006, 92, 251; pl. 34; 94, 254, pl. 35.
35. Sperveslage 2011; Willems 2012.
36. Willems 2012, 97.
37. Posener-Kriéger *et al.* 2006, 94, 253, pl. 35.
38. Bonati 2010; Bonati 2013.
39. Allen 2013a, PT 49, 7 = 1644b.
40. Allen 2013b, PT 269, 1–3 = 376a–378b; 2013e, PT 684, 8 = 2053a–b.
41. Allen 2013b, PT 269, 8 = 378b.
42. See, e.g., Dolzani 1968, 17–18.
43. Allen 2013b, PT 437, 34–35 = 803c–d; PT 483, 18–19 = 1017a–b; 2013d, PT 610, 23–34 = 1718a–b.
44. Boivin and Fuller 2008, 137–138; Baldi 2014, 81–82.
45. Roy 2011, 212–214.

46. Edel 2008a, 625, pl. 27, fig. 5; Strudwick 2005, 328–333, no. 241. Another aromatic item, *hknw*-oil, is mentioned as the third product (Edel 2008a, 625, pl. 27, fig. 5).
47. Edel 2008a, 50–52, pl. 9; Strudwick 2005, 335–338, no. 243A.
48. Edel 2008b, 1743–1744, 1751, no. 5a.
49. Jacquet-Gordon 1962, 381, no. 24S5/6; 288, no. 34G5/55?; Kanawati 1981, 38, no. 3, pl. 25; Berlin ÄM 3/65, Kaiser 1967, 32, no. 295; Porter and Moss 1981, 694.
50. On the substance, see Koura 1999, 208–215. On the reading ‘*ntw* instead of ‘*ntyw* see Edel 1980, 46–48.
51. Baum 1999.
52. El-Sayed 2011, 177, L128*.
53. Koura 1999, 216–217.
54. Guglielmi 2012.
55. An unpublished fragment from a biographical stela in the tomb of Djehuty (TT 11) mentioning ‘*ndw* possibly in connection to Hatshepsut’s expedition should be added to the attestations recorded by Koura. I am indebted to José Manuel Galán (CSIC, Madrid), director of the Spanish Mission at Dra’ Abu el-Naga for this information.
56. Allen 2013b, PT 318, 6* = 512b; Shmakov 2015, 170.
57. According to Farout (2012, 104–105), ‘*ndw* could be related to the word ‘*d*, “fat” (Koura 1999, 110–114). Moreover, according to the same author, ‘*ntw* could be a good made, among other elements, of ‘*ndw*.
58. El-Awady 2009, 160–161, pl. 5; 166–172, fig. 83; 253–257, pl. 6.
59. I am indebted to S. Aufrére for calling my attention to this fact.
60. According to Ali *et al.* (2009, 20–21, 22, figs 1–2), *mengaf* is for tapping *Boswellia* spp. and *sonke* for *Acacia senegal*.
61. Lemenih and Teketay 2003, 67; Tadesse *et al.* 2007, 217.
62. Tadesse *et al.* 2007, 219
63. Lemenih and Teketay 2003, 67.
64. El-Awady 2009, 256.
65. Edel 1996, 200–204, fig. 1.
66. Arnold 2014. I am indebted to Felix Arnold for providing information on this discovery. For a similar garden, the tree species of which have not yet been identified, see Stadelmann *et al.* 1993, 260–261, figs. 1a–b.
67. Koura 1999, 216–217.
68. Diego Espinel 2011a, 67–68, 185.
69. Allen 2013b, PT 347, 1 = 563a.
70. Posener-Kriéger 1976, 441.
71. Koura 1999, 125–127.
72. Diego Espinel 2011a, 191.
73. Kaplony 1963a, 308; Koura 1999, 124–125.
74. Tákács 2008, 794, no. 8.
75. Diego Espinel 2011a, 191–192, fig. 2.18; Hannig 2003, 579 {14460}.
76. Binder 2008, 201–205.
77. Binder 2008, 69–70.
78. Brovarski 2001, 90.
79. Gourdon 2016, 254, no. 10, 255, no. 3.
80. Sowada 2009, 163–165, table 8; Knoblauch 2009; Forstner-Müller and Raue 2014.
81. El-Khouli and Kanawati 1990, pls. 62, 65, 67; Diego Espinel 2011a, 190–191.
82. On these attestations see Sharuna *et al.* 2004, 197, T30, Beilage 16 (Grab. V23) (Sharuna); Blackman 1924, 39, pl. 14; Kanawati 2012, 49–50, pls 44a, 84 (tomb D2) (Meir); 1982, 19, pl. 6, fig. 17b; 1987, fig. 17b (tumba BA14); 1989, 58–59, pl. 9b, fig. 30b (el-Hawawish); Diego Espinel 2011a, 193–194, fig. 2.19.3 (Naga ed-Deir); Säve-Söderbergh 1994, 65, pl. 49^a (el-Qasr wa el-Saiyad); Edel 2008a, 50–52, pl. 9 (Qubbet el-Hawa).

83. Goedicke 1994, 78, no. II, 9; 73, fig. 1.
84. Edel 2008b, 1743–1744, 1749–1750, nos 4a.1–2, pl. 72; Diego Espinel 2011a, 201–202. According to the same biography, Setka brought *sntr*, hamadryas baboons (?), and grivets from the African countries of Yam, [...]n³b, and Satju, respectively (Edel 2008, 1743–1744, 1751–1752, nos 5a, 5d.e, 5c–e).
85. Goedicke 1994, 76, no. I, 9.
86. Fischer 1963, 28–34; Laisney 2009.
87. El-Awady 2009, 151–183.
88. Diego Espinel 2011a, 186–187, fig. 2.17.
89. Verner 2011.
90. Diego Espinel 2011a.
91. Diego Espinel 2011a, 287, 344, fig. 4.9, 356, 443, fig. 5.13.
92. Osborn and Osbornová 1998, 32–37; 39–41; Masseti and Bruner 2009. According to el-Sayed 2011, 283–284, L372*, *gf* could be an African loanword.
93. Osborn and Osbornová 1998, 38–39. ‘*nr* and *inr* could be employed indistinctively for referring to both baboons; see Hannig 2003, 41 {1009}.
94. von den Driesch 1993, 18. The dates regarding the disappearance of species in ancient Egypt are not conclusive at all. For instance, Arnold (1995, 60, no. 83) mentions that both the grivet and the Anubis baboon survived in the wild until the Middle Kingdom. On different opinions on the extinction of animals in Egypt see, for instance, Yeakel *et al.* 2014, the reviews of Bar-Oz *et al.* (2015) and Evans (2015) on that article, and the response of Yeakel *et al.* (2015).
95. Peláez and Zinner 2002; Dunn 2011, 29–32.
96. Linseele and van Neer 2009; van Neer *et al.* 2015.
97. Arnold in Metropolitan Museum of Art 1999, 199–201, no. 24a.
98. Migration routes and winter areas could change in the past, however, at it is the case of the greater flamingo (*Phoenicopterus roseus*) (Roquet 1985, 118–119). Moreover, common cranes winter currently in the Nile Delta and Lake Nasser too (Houlihan 1986, 83).
99. Dasen (1993, 93, 114; 2008, 56–57) refers to the ambiguity of infants and dwarfs in ancient Egypt.
100. The arrival of hamadryas baboons to the Arabian Peninsula is currently dated to the Late Pleistocene. It is not the result of the tight commercial and cultural contacts among the human groups at both sides of the Red Sea (Kopp *et al.* 2014). The same can be said regarding the distribution of cheetahs (Charruau *et al.* 2011) and leopards (in this case the distribution happened earlier, during the late Pliocene and early Pleistocene; see Uphyrkina *et al.* 2001).
101. Nowak 2015, 248–250, nos 5?, 7, 8, 70, 72?, 73, 81; el-Sayed 2011, 151, L63; 165, L 99.
102. Blench 2008, 72, I am indebted to Dr. Banti for this observation. This identification has to be considered cautiously since many other African – and Asian – languages have a similar root for naming the dogs.
103. el-Kilany 2013; Braulińska 2014, 62; el-Kilany and Mahran 2015.
104. Dasen 1993, 114–118.
105. Dasen 1993, 25–27.
106. For other activities see Listemann 2010, 70–89. On depictions of baboons employed as “K9 agents” in markets, see Oxford Expedition to Egypt Scene-details Database, theme no. 11.1.8 [1], [2]. See also Labrousse and Moussa 2002, 33–34, 144, fig. 36, doc. 22A–B.
107. Osborn and Osbornová 1999, 119–123; Castel Ronda 2002.
108. Rummel 2004.
109. Dasen 1993, 117; Osborn and Osbornová 1999, 120, fig. 7–221.
110. van Neer *et al.* 2013, 297–298. The animal was present in the Egyptian Eastern Desert until the 20th century; see van Neer *et al.* 2013, 298.
111. Edel 2008a, 625, pl. 27, fig. 5; see also Hannig 2003, 5 {176}; 406 {9242–9244}; Redding 2007; 2010, 73.
112. Allen 2013a, 224, 11 = 219b; 225, 6* = 223a; 2013b, 263, 6 = 338b; 2013c, 469, 10 = 907a.

113. Donadoni Roveri 1969, 87–89. During the New Kingdom leopards were also included in the lists of products from Punt mentioned and depicted at Deir el-Bahri and in some Theban tombs (Diego Espinel 2011a, 336, 366, fig. 4.15, 368–369, 414, fig. 5.5, 443, fig. 5.13, 457, fig. 5.18).
114. Dasen 1993, 117, pl. 24, no. 1, E57.
115. Harpur and Scrimin 2008, 357, fig. 6.
116. Vymazalová 2010, 203 and below.
117. Borchardt 1913, pls 59–60; Butterweck-Ibrahim 2002, 32–33, tables I.1–2.
118. Warden 2014, 223–268.
119. Diego Espinel 2015, 250.
120. Moreno García 2013, 94–96; 2014, 249–252.
121. Richards 2005, 109–111; for examples in the Old Kingdom see e.g. Diego Espinel 2011a, 162–163, fig. 2.10, 192–194, fig. 2.19.3.
122. See Creasman (2014) for a discussion of a New Kingdom parallel.
123. Martin 1979, 23–24, pl. 24, no. 27; Koura 1999, 273–274.
124. Jones (2000) does not include this title. *Nwd* is attested in some monuments as a title (Koura 1999, 278–279). Moreover, it is sometimes related to the office “inspector (*shd*),” generally related to workers and places, not to materials (see, however, Koura 1999, 280 and Jones 2000, 928, nos 3416–3417). In any case, when it is related to the office “overseer (*imy-r*)” and “custodian (*iry-ht*),” *nwd* could refer to perfumes, as Koura and Jones do (Koura 1999, 279, 281; Jones 2000, 152–153, nos 588–591, 325, no. 1201). The link of *nwd* to “under-supervisor (*imy-ht*)” is more ambiguous. Even though almost all their related subjects of control are workers and places, there is an “under-supervisor of *mrht*-oil of the palace (*imy-ht mrht pr-³*)” (Koura 1999, 278; Jones 2000, 287, no. 1043).
125. Martin 1979, 22–23, pl. 23, no. 22. Another reused block from the Saqqara catacombs mentions two “sons” from an unknown official who held the titles *shd nwd(y.w) hkr ny-swt* and *nwd(y) hkr-ny-swt* (Martin 1979, 22–23, pl. 23, no. 22; Koura 1999, 278–279). Having in mind the same provenance and the rarity of the titles, this block could come from the same tomb and it would suggest that, as many other offices, perfume making skills passed from father to sons (Posener-Kriéger 1991).
126. Koura 1999, 280.
127. E.g. Martin 1979, 22, no. 22; 23, no. 27; see also 24, no. 29; 36–37, no. 99; Davies 1901, pl. 32; Koura 1999, 278–279.
128. Speidel 1990, 113, 130, 144; Tassie 2008, 107–112, fig. 21.
129. Jones 2000, 306–307, nos 1116–1118.
130. A travertine vase (BM 57322) for *ibw*-unguent of king Isesi mentions the “royal ornaments,” see Goedicke 1957. According to that author (Goedicke 1957, 68), the vase would form part of a regular provision of *aromata* every ten days. Aufrére (1991, 362–363) suggests that the “royal ornaments” would refer to a department in which the regalia would be not only kept but also created. Therefore it would contain all the necessary products for the fashioning of the royal attire.
131. Nord 1970, 8–9; Brovarski 2001, 83, no. 1.
132. Koura 1999, 279. A single chamber of the royal ornaments is also attested, for instance, in the title “overseer of the chamber of the royal ornaments (*imy-r iz Xkr[.w] ny-zwt*)” (Jones 2000, 63, nos 296–297).
133. Jones 2000, 67–68, nos 310–311.
134. Goelet 1982, 33–34, 95–96.
135. Koura 1999, 279; Jones 2000, 152–153, no. 589.
136. Koura 1999, 279; Jones 2000, 153, no. 590.
137. Goelet 1982, 32–33.
138. Koura 1999, 277–278; see also Vachala 2004, 72, fr. E 1765, 82, fr. 305.
139. Koura 1999, 277; Jones 2000, 140–141, nos 546–547.

140. Koura 1999, 278; Jones 2000, 317, no. 1165. See also the title “keeper of the *mrht*-oil of the Great House (*iry mrht pr-³*)” (Koura 1999, 278; Jones 2000, 317, no. 1164).
141. Goelet 1982, 36.
142. Jones 2000, 201, no. 754.
143. Silverman 1994, 248–249; Desplancques 2006, 147–148.
144. Posener-Kriéger *et al.* 2006, 158, 291, pl. 67, 354–355.
145. Verner 2006, 224, no. 62. Verner (2006, 252–253, no. 187C, 8) reads the title [*imy-r*] *pr hkrt ny-zwt* (see also index, Verner 2006, 269). The signs in the drawing of the sealing do not permit the reading of that title, however.
146. Verner 2006, 221, no. 51.
147. Verner 2006, 259, no. 211. Another sealing from the temple of Reneferef could mention some kind of mineral, resin or *aromata* (*mrht?*). Verner (2006, 236, no. 120) reads the remaining signs as “Bedouins? (*hry.w s^c?*).”
148. Posener-Kriéger 1976, 255.
149. Papazian 2010, 152–153.
150. Posener-Kriéger 1976, 491.
151. Posener-Kriéger 1976, 370, no. 51.
152. Posener-Kriéger 1976, 372–374, no. 52.
153. Posener-Kriéger *et al.* 2006, 53, 227, pl. 14. A piece of an unidentified resin, maybe incense or myrrh, was discovered close to the Satet temple at Elephantine (Kaiser *et al.* 1997, 140, n. 89). According to the archaeologists, it dates from the Fourth Dynasty. This evidence could attest the distribution of *aromata* to the provinces or, alternatively, its acquisition by the temple following other paths (Elephantine was the door to Nubia and the African exotica).
154. Posener-Kriéger *et al.* 2006, 53, 228, pl. 14.
155. Goelet 1982, 32–33.
156. Pieke 2013, 303–305, figs 5–7.
157. See Harpur and Scrimin 2006, 476–487; 518–521, figs 34–38.
158. See Kanawati and Abder-Raziq 2000, pl. 64.
159. Kanawati and Abder-Raziq 2000, pls 63–65.
160. Oxford Expedition to Egypt Scene-details database 2006, theme no. 11.1. [3–4], [7], [9–10].
161. Florès 2015, 252, 248.
162. Pieke 2008.
163. Diego Espinel 2011a, 193–194, fig. 2.19.3.
164. Borchard 1913, pl. 3; D. Arnold in Metropolitan Museum of Art 1999, 333, no. 111.
165. Another relief, now lost, from Unas’s causeway, depicts a baboon, a dog, and two felids (cheetahs?) connected to ships (Diego Espinel 2011b, 62–64, fig. 8). May it be an expedition scene?
166. See respectively Jones 2000, 432, no. 1594; 337, no. 1243.
167. Jones 2000, 69, no. 312.
168. Brovarski 1973, 455, n. 13. This official and his false door have been recently studied by Brovarski (2016, 59–74). I have not been able to consult this reference, regrettably.
169. Redding 2007; 2010, 73.
170. Knoblauch 2009.
171. Reisner 1942, fig. 263.
172. El-Awady 2008.
173. Roth 1993; Bárta 2015, 6–7; Borrego Gallardo 2014.

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Chapter 4

African *aromata* in Egypt: the “*ti-shepes*”

Ilaria Incordino

This paper aims to present some preliminary results of an ongoing two-year research program, itself part of a wider project called *African Transitions: Linguistic and cultural Areas of Transitions in Africa* (ATrA, www.africantransitions.it), funded by the Italian Ministry of University and Research (FIRB 2012).¹

The larger project is focused on development of a better understanding of the “identity” definition process of cultural human groups in Africa: one of the most debated questions on an international level today. In East Africa in particular, the constant reshaping and renegotiation of identity, along with the continuous contact of great cultures – extant or extinct, intertwined with a variety of local and peripheral traditions in a plurality of very different social and ecological settings – is evident. This is the reason why the object of this study is represented by such a geographic area.

The working team is composed of different specialists (linguists, philologists, anthropologists, archeologists) to provide a multidisciplinary approach, which should result in a more holistic interpretation of complex and interconnected data in order to obtain a general interpretation of the phenomenon of transition itself.

The case study of some African aromatic products imported into Egypt in antiquity has as its principal aim to develop a better understanding of how those foreign products were generally perceived by the ancient Egyptians and how and when they were incorporated into the Egyptian cultural paradigm, connected in particular with the mythological and religious realms.

African *aromata* in Egypt: their values and state of the art

Beside their primary economic and social value as status symbols, the aromatic products, derived mainly from Egypt’s southern neighbors (Nubia, Punt), had many ideological and religious implications. Such implications can be deduced through a variety of mythological, religious, and tribute offerings texts. The economic and symbolic values of the aromatic products are directly related to one another, as indicated, for instance, by the textual and iconographic references to the commercial expeditions planned by the crown since the Old Kingdom.²

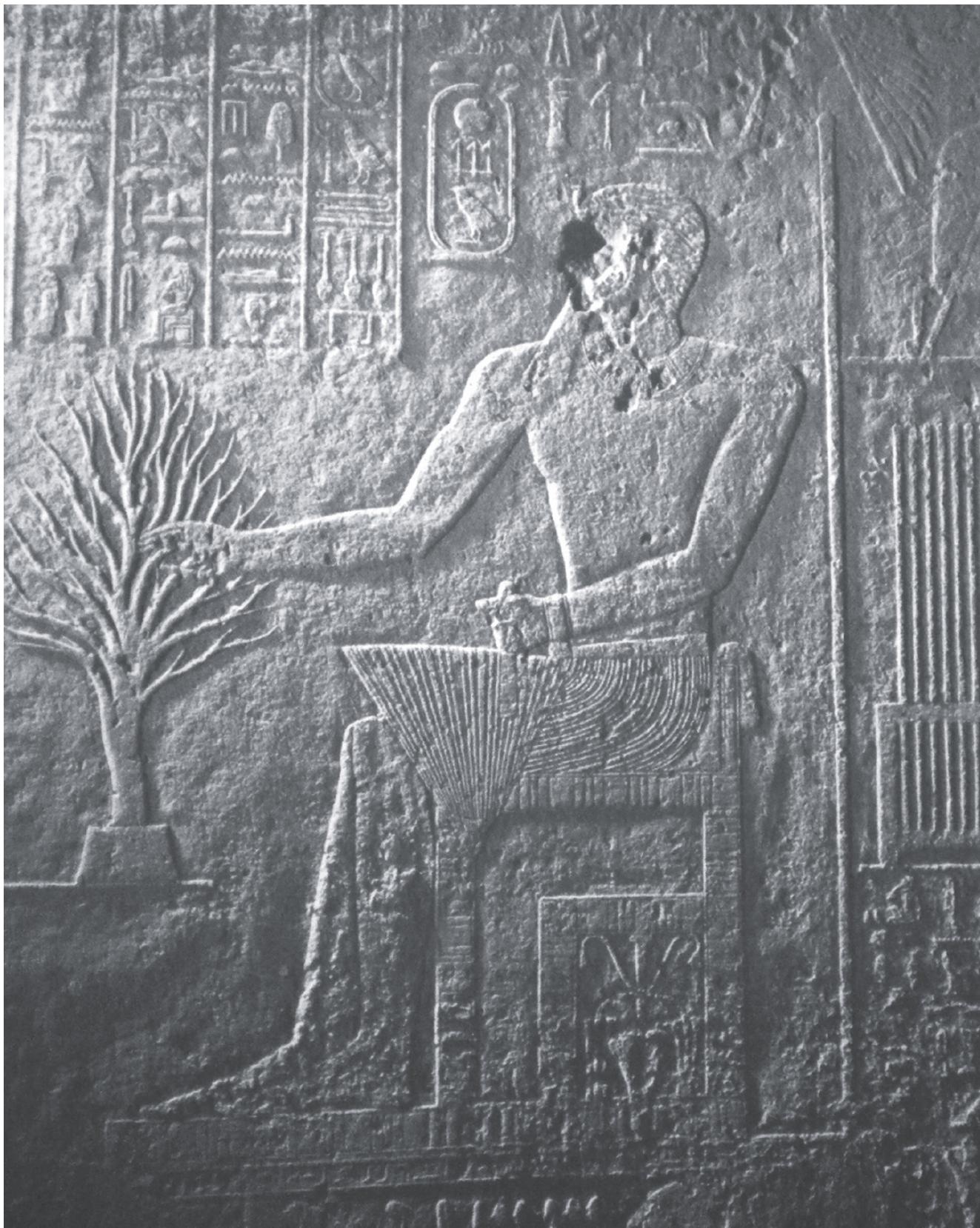


Fig. 4.1. King's Sahure's Punt reliefs from his temple at Abusir (from el Awady 2009).

The scenes of the recently discovered reliefs of the Punt expedition of King Sahure (Fifth Dynasty) represent a good example of conveying a message of royal propaganda that involves aromatic products. The king is shown seated on his throne (Fig. 4.1) as the only person directly receiving the aromatic resins (exuded from the myrrh trees obtained from Punt) without any intermediary divine figure, in his role as keeper of the state monopoly. In another scene, the king himself is cutting the trunk of a tree with an adze to extract the precious resin, while his officials and courtiers wait for their reward, bowed down with their hands stretched out.

It is apparent from such representations that the provisioning and redistribution of exotic luxury items, such as these aromatic products, is an act that can be performed ideally only by the king. In this way, it is the king who determines the social status of the court members and strengthens their political loyalty.

The exclusive relationship between the king and the exotic products displayed by the Sahure reliefs seem to have been transformed during the New Kingdom, about 1000 years later, when the presence of the dynastic god Amun-Re is predominant, for example, as found in the scenes from Queen Hatshepsut's temple at Deir el-Bahri (western Thebes). The same topic of a commercial expedition to Punt is represented there, using many textual and visual elements already present in the Sahure's reliefs.³ However, a significant deviation is that the Father of the Gods, Amun, is the one receiving the precious products, which the queen dedicated to him as her divine father. The success of the expedition was attributed entirely due to the divine benevolence:

Words by Amun, lord of the Thrones of the Two Lands (to the queen): ... I have given you all life and dominion from me, all stability from me, all health from me ... I have given you Punt in its entirety including the Land of the Gods that has not been entered, and the myrrh terraces unknown to the Egyptians. ... No one will reach them except your explorers, for I will let them enter it after I will have entered the myrrh terraces. It's a sacred region of the God's Land, it is my place of enjoyment. ... May they take as much myrrh as they wish and load the ships to the satisfaction of their hearts ... Arriving safely in the land of Punt by the expedition of the lord of the Two Lands in accordance with the utterance of the lord of the gods Amun ... to fetch for him precious goods from every foreign land.⁴

To obtain a clearer idea of the economic and political importance of those products for the ancient Egyptian state, it can be mentioned the observations of some scholars, who have compared the ancient search for aromatic products to the modern hunt for oil⁵: a way to obtain an immense political power over a strategic area (the Red Sea Region and the Horn of Africa) through the monopoly of trade networks⁶ of expensive goods. Creasman has proposed that this is precisely one of the, if not *the*, primary motivating factor(s) in Hatshepsut's Punt voyages.⁷

With the aim of identifying the possible botanical species represented by those anciently named products, the most significant studies have been conducted through a careful lexicographical analysis of the words related to aromatic products.⁸ These studies have been pursued in hopes of tracing the geographic sources of this ancient trade, especially when connected with Punt,⁹ traditionally regarded as the primary source of *aromata* according to the Egyptian texts. In more recent studies, scholarly attention has shifted toward a better understanding of the mythological and religious value of aromatic products in general (Aufrere 2016), attempting to shed more light on the process of assimilation of foreign elements into the ancient Egyptian cultural paradigm.

The most important element of *aromata* is of course scent, which, according to the Egyptian mythology, represents the divine presence on Earth. A persistent fragrance, often of Puntite origin, is the unequivocal mark that some god has been evoked for an oracle or has come to Earth for some special purpose. The text at Deir el-Bahri describing the divine birth of Hatshepsut is a good example of the latter: the queen's mother is awakened by the divine presence, manifested through his perfume from Punt, of Amun-Re, who has come to Earth to generate his daughter (Hatshepsut), future king of Egypt.

The palace was filled with the perfume of the God ..., she awoke because of the fragrance of the God ..., all his fragrances were of Punt¹⁰

The strong link between aromatic products, divine world, and pharaonic ideology is underlined in many religious and official texts. These texts can be considered a symbolic translation of the political program of continuous provisioning of those luxuries, in particular from the New Kingdom onward. In

one example, the postulation of a mythic origin of *aromata* is illustrated by the myth of Osiris, in which the god's death is mourned by all the gods with very interesting consequences:

Then Horus began to cry. His tears fell to the ground and grew: this is how myrrh (*antiw*) came into being. ... Then Shu and Tefnut began to cry exceedingly much. The water of their eyes fell to the ground and grew: this is how incense (*snetjer*) came into being. ... Then Isis and Nephtys grew very very tired. Their sweat went out into the ground and it grew. This is how the *ti-shepes* plant came into being.¹¹

The strong association between aromatic products and gods' corporal humors in some religious texts (such as Papyrus Jumilhac, Papyrus of the Delta, or Papyrus Salt) stresses perfectly their divine character.¹² Such associations were established in order to set their ideological value as strong motivation for the never-ending provisioning attempts during the centuries. Through this postulation, the quest for *aromata* becomes the search for divine elements to bring back in Egypt from their original place (Punt, known a "God's-Land"), in order to recreate a divine environment where the gods can be evoked.

The sacred space takes often the form of a garden inserted into the architectural plan of many of the principal cult temples of the country, which could be equipped with an open space containing all the animal and vegetal species of Egypt and other countries to be offered to the gods. One of the best-known examples is the so-called botanical garden of the temple of Amun at Karnak, Thebes (Fig. 4.2), dated to the reign of Thutmose III, in which different plants were represented as tribute from defeated countries.

In other instances, the gardens can also be part of an actual recreation of the God's-Land in Egypt. Such an example is found at the so-called Punt chamber of the Ptolemaic Athribis temple (Fig. 4.3). At the site there was possibly an open chamber where myrrh trees (or other aromatic plants) were planted to represent a continuous offering to the gods. The same meaning can be ascribed to the reliefs that decorate the walls: a detailed description of the aromatic plants deriving from Punt and God's-Land, with apparently accurate indications of their color, aspect, resin, scent, and also their medical/cosmetic use.

In the mythological conception of ancient Egyptians this "garden of Eden" has not been made for man, but rather for the gods and their pleasure (even the most sensual one¹³) on Earth. The aromatic products represent, then, a connection between the human world and the divine. In this view, the provisioning of those goods implied many deeper symbolic values connected with the religious sphere.

Another interesting link has been recently suggested by Aufrere,¹⁴ with the association between the myrrh resin production as and its emanation from the female falcon, epithet of different goddess, primarily of Hathor "Lady of Punt." Falcons, in general, are vehicles of the divine according to the ancient Egyptian mythology, and they can foresee the god's presence. This element can be further joined with the Greek myth of the phoenix, considered a myrrh carrier by Herodotus, representing another element related to the solar cult of Heliopolis, through the soul (namely the "ba") of the falcon-headed god Re the Behedite, Lord of Punt and God's-Land, worshipped at Edfu temple.

ATrA Research Project and methodological issues

The *aromata* project began with the collection of all textual and iconographic references to five selected exotic products, to be compiled in a digital database. The choice consists of scented plants or trees whose botanic interpretation, and consequent translation, is, in most instances, still far from clear: "hebony" (*hbny*), "ti-shepes" (*ti'-šps*), "hesayt" (*hs'yt*), "menenen" (*mnnn*), and "ihemet" (*ihmt*); also maintaining for reference the rich bibliography about frankincense (*snetjer*, *sntr*) and myrrh (*antiw*, *'ntiw*).¹⁵

In order to add more data useful to the project, besides the lexicographical analysis of *aromata*, a study of different determinatives associated with those words has been included in the program

(following a suggestion given by Nathalie Baum¹⁶). This aspect was included in hopes of deriving additional clues, not only for the identification of their possibly geographic origin and linguistic variations through time, but mainly of their symbolic meaning in the framework of the Egyptian culture.

Finally, this project will provide an iconographic analysis of *aromata* representations, a component that hopefully will better clarify the principal physical characteristics of *aromata*, both when represented as raw materials and as final product. Similarly, the iconographic record will include their mode(s) of transport from their sources to Egypt, through the analysis of the containers mentioned in various literary contexts and shown in visual representations.



Fig. 4.2. Relief from the “botanic garden” of Karnak with a possible representation of the aromatic product hesayt (*hs*□*yt*) (photograph © I. Incordino).



Fig. 4.3. King Ptolemy XII offerings to goddess Repit and god Min at Athribis Temple (courtesy and © Christian Leitz).

Myriad methodological issues result as a consequence of the scope of this work. The proposed work attempts to instill a sense of classification and order over an ancient system of classification of the natural word that has been noted for decades to lack the necessary features for such precision. Some scholars still debate whether the Egyptian had an actual system to classify the vegetal world as we mean it (e.g., *anything* akin to the Linnaean taxonomy in use today, if far less detailed), and thus have a word/concept for every single species of plant, or whether they grouped in one word several similar plants with common physical features.¹⁷ It is most likely that if a new word appears in the ancient sources, it does not necessarily refer to a new, previously unknown product, and, at the same time, an old word does not always refer to the same product. Knowledge of the natural world in antiquity was probably based on empirical experience, so if there was an unsatisfactory availability of a particular product during some historical period, another one with similar physical characteristics could be used and referred to through the same word.

Having spanned some 3000 years, pharaonic civilization underwent numerous changes during the various periods and language was no exception. In the Late and Ptolemaic Periods, a possible shift of principal trade routes could have led to the emergence of “new” Egyptian words to identify “old” aromatic products,¹⁸ thus increasing the number of not only linguistic references to be considered but probably also the botanic species (or their variants) to which those words referred. A telling example is the case of the 14 “antyw/antj” (myrrh/oliban) types reported at the Horus Temple of Edfu,¹⁹ which are divided into several groups depending mainly on their quality/freshness, supplied with a detailed description of their physical characteristics (color, shape, scent) and often connected to a divinity (or a divine body part).

In the texts deriving from other Ptolemaic temple laboratories (Athribis, Philae, etc.) there exist meticulously listed ingredients needed to prepare the ritual products for the cult, together with the procedure, phases, and doses for each material. The need to establish the correct sequence of preparation, and the right substances to be involved in it, on the stone walls of the principal temples of the period could be connected with contemporary attempts to adulterate those ritual products, creating their sort of equivalents to be used as cosmetics or medical preparations in everyday life. Polymorphy and falsification are therefore different aspects of this already complex analysis, fundamental elements for the ethnobotanical research, not to be ignored in the attempt to identify those Egyptian names of vegetals.

The issue is further complicated as aromatic products represented species of foreign flora, which did not grow naturally in Egypt. Many such terms for these items may, then, not be originally Egyptian, but loan words. Some scholars have recently suggested that those names can derive from foreign toponyms, adding more difficulties to the identification attempt.²⁰ Baum, specifically, has suggested the importance of ethnobotanic and pluriregional geobotanical studies in order to obtain the most complete and detailed context of information regarding the identification of those products origin.²¹

The collection of references to aromatic foreign products conducted during the ATrA case study has elucidated the extreme heterogeneity of the documentation, in regard to both variants of the words and their support or literary context. The most complete list of *aromata* occurs in the Punt expedition text in the temple of Hatshepsut at Deir el-Bahri. Other hieroglyphic and hieratic references to *aromata* are also found in literary sources, such as the *Tale of the Shipwrecked Sailor*, or in tomb biographies, such as Harkhuf's.

The heterogeneity of the documents mentioning aromatic products is apparent. The presence of many of these products in medical and ritual texts too (for example, the Ebers Papyrus, the Pyramid Texts, embalming rituals, and so on), due to their use also as medical remedies and elements of the mummification process, provides confirmation. From a research standpoint, the writing surfaces include a very wide range of material, from papyrus to ostraca, from stone walls of temples to ceramic funerary equipment, raising the level of complexity in interpretation. For some products²² their possible occurrences in Classical period literary sources represent another complication (and perhaps opportunity) as the linguistic transition for terms from Egyptian to Greek or Latin is not fully understood.

The paucity of attestations pertaining those aromatic products in respect to the huge chronological range to which they can be ascribed (Second Dynasty – Ptolemaic Period) further complicates matters. Proper philological analysis would require a vast set of uses for such a wide timeframe. Without such clear and regular use over time from which to work, it raises the strong possibility that the most ancient meaning of those words could have (and likely did) alter with the passing of time.

Additional elements supporting such hypotheses can be found in the temporal distribution of the ca. fifteen documented expeditions to Punt. The known voyages fall into a very large chronological range, since the Fifth Dynasty (Sahure). Therefore, in order to detect those possible changes of writing and meaning, the same chronological range has been considered for this research project, restricting the number of products that are subject to analysis.

Despite the methodological problems noted above, the ATrA case study has so far produced a digital database, including all the references to the five *aromata* selected, with their variants, and is trying to proceed first with the lexicographic study. Next, all the previous hypotheses of interpretation were collected, and some directions of research have been undertaken with the aim of supporting the most likely hypotheses with new documentation.

Ti-shepes (Ti-šps)

Ti-shepes represents probably the most cryptic aromatic product to identify: the earliest evidence is dated to the Middle Kingdom, while the latest has been found in the laboratory of Edfu Temple (Late

Period, ca. 664–332 BCE), for a total number of about 20 occurrences. There are no references dated to the Old Kingdom so far.

Different variants of this word are known, often regarding the determinative signs, which are currently undergoing statistical analysis as part of the philological work in progress. Several translation hypotheses have been suggested in the past, the most frequent of which is “cinnamon,”²³ but since the most important source of cinnamon is Sri Lanka, it seems unlikely that India was included in the Egyptian trade network already during dynastic period. Another hypothesis suggests aloe,²⁴ whose characteristic fragrance cannot be classified as pleasant in the same way as other ancient aromatics, even if it does have some properties used today in medical remedies similar to the medical use of *ti-shepes*, according to the Egyptian medical sources.

One of the most likely hypotheses so far is that of Luchtrath, who has proposed an African species of camphor tree (*Ocotea usamborensis*). Camphor is characterized by a strong fragrance and many perceived and genuine medicinal properties (antiseptic, anti-inflammatory, and vasoconstrictor), which were very likely known in antiquity.²⁵ In fact, in the Ebers Papyrus *ti-shepes* is part of many medical remedies to heal wounds (burns), headaches, and stimulate blood circulation.²⁶ The ancient prescriptions strictly limited the use of *ti-shepes* in their cures; it was not to be ingested because of its toxicity. Camphor is used today for similar purposes and is poisonous if swallowed, provoking vomit, paroxysm, and even death (if the assumed quantity is more than 4 gr).

*Remedy for a burn wound in purulence: copper filling, malachite, cypress berries (?), fresh snetjer, cumin, ochre, wax, ti-shepes, hesayt, antyw, Aleppo pine oil.*²⁷

Camphor’s geographic origin is the same of the other *aromata* (Punt and God’s-Land), with which it is often associated in the lists of luxury products (i.e., the temple at Deir el Bahri, the Tombos inscription dated to Thutmosis III,²⁸ the *Tale of the Shipwrecked Sailor*). The difficulties of interpretation of this word cannot lead to a more accurate indication of an area of provenance.

Following the general aim of the ATrA case study, the analysis of aromatic products iconography (when present) has been conducted in order to shed more light on their supposed origin. The *ti-shepes* representations are few in number, but they are very interesting for the elements of this material shown in some painted tomb scenes. The tomb of Rekhmire (TT100) at Qurna (Thebes, Eighteenth Dynasty), for example (Fig. 4.4), contains one of the rare visual representations of aromatic products, *ti-shepes* included. The scene represents the filling of the Karnak Temple of Amun storerooms and treasury, of which Rekhmire was in charge during his lifetime. In a detail of the image it is possible to see *ti-shepes* represented among such luxury products as silver, myrrh (*antiw*), and frankincense (*snetjer*) on the left, separate from the organic products shown in another portion of the scene, which have to be stored in another (specific?) building. Significantly, *ti-shepes* is represented as long and narrow yellow sticks of wood.



Fig. 4.4. Storing of luxury products (*ti-shepes* above arrow) in the Karnak Temple treasury show in TT100, tomb of Rekhmire (after osirisnet.net).

The Rekhmire depiction could lead to the suggestion that acquisition of this specific type of *aromata* was oriented toward its trunk and branches, which probably contain the fragrance, rather than its resin. So, perhaps this tree does not have any exudate production, but only a very persistent scent deriving from its own wood. Therefore, the translation of *ti-shepes* as camphor (Luchtracht's hypothesis) could be suitable based also on those observations.²⁹

Concerning the mythological and symbolic value of *ti-shepes*, it is of note that its probable use included the preparation of one of the most ancient sacred oils: *medjet*.³⁰ *Medjet* was usually used in a funerary/ritual context,³¹ but also during the royal jubilee celebrations held since the Old Kingdom, together with myrrh (*antiw*) of second quality, wine and animal fat and other fragrant resins. This last element could be an indirect proof confirming that the Egyptians obtained *ti-shepes* also during the Old Kingdom, even if there is no direct textual evidence to date.

Ti-shepes had several uses. It is mentioned in many religious texts, and so it has many connections with the divine sphere as one of the god's emanation according to myth. Another known application is in the making process of the *kyphi* (*kapet* in Egyptian) incense/fragrance,³² which became popular outside of Egypt in the Classical period as well: Galen, Dioscorides and Plutarch are the main authors who described the production process in many different variants and contributed to sharing its knowledge in Classical antiquity. At the Edfu and Philae Ptolemaic temple laboratories an accurate recipe for the production of this precious fragrance was recorded, which lists every single ingredients and its dose,³³ *ti-shepes* included, even if without any clue useful for its identification.

Conclusion

The preliminary results of the ATrA research project are encouraging and, indeed, quite promising. The mythological and ritual meanings of aromatic products of foreign origin in Egypt are becoming clearer, as is the complex ideological system of Egyptian culture surrounding their uses. The motivations behind the integration of foreign elements in another culture can be glimpsed in the understanding and study of the complex of values attributed to *aromata* by the Egyptians.

Different layers of meaning are being traced (i.e., determination of social status, derivation from divine sphere, medical properties, and magical values to evoke gods). The continued need for the use and acquisition of *aromata* in Egypt is being better understood through the study of the documentation, itself resulting from an ancient process of the creation of myths that justify the need for such luxury items. The consequent efforts in terms investment of economic and manpower resources to secure exotics could be so balanced.

Yet, the central element emerging from this research project is the theoretical necessity of linking those materials with the ancient Egyptian pantheon of divinities in order to provide them with a religious value strictly connected to the survival of the Egyptian state. This symbolic aspect of aromatic products is therefore stressed in religious texts as a result of their fundamental importance for keeping in touch with the gods – the only entities who could guarantee the preservation of life and order in the country. The close observation of royal reliefs recording expeditions to Punt has underlined the rule of the king in this respect as central: he was keeper of order against chaos, the only means between the human and divine world, and, coincidentally, the owner of the principal state monopolies.

The analysis of the references to aromatic products related to the “garden of the gods” has been advanced. This study has revealed that it was important not only to trace a link with the divine sphere through *aromata*, but to recreate spaces on Earth in which the gods could be evoked. Such a space had to remind the divinities as much as possible of their favorite places in “Gods’-Land.”

Another point yielding quite promising results is the deeper analysis of “magic/medical” values attributed to the foreign aromatic products. Once again, use was regarded as a necessity of maintaining contacts with the divine world. The recipes containing aromatic products recorded in medical papyri and on the walls of temple laboratories are always accompanied by a religious element, since it is not possible to heal without the gods’ benevolence. Many concoctions were, moreover, used also for other temple rituals, for funerary preparation (mummification), and for the general cure of religious furnishings.

The connection with some gods and goddess of likely southern origins, or gods in other ways associated to foreign lands to be exploited by the Egyptians (Soped, Min, Hathor), is significant. Consequently, the demand to obtain *aromata* and their mythological and symbolic aspects intersect and tend to contain a consistent reference to the south of Egypt.

The lexicographic attempts to identify the raw materials and analyze the determinatives and variants of those words are the branch of research with the fewest preliminary results, owing to the numerous methodological and inherent issues previously described. The effort to identify a specific determinative for a specific textual context or phase of production of the aromatic items seems at present not so productive. For instance, the *ti-shepes* determinative of the tree or just a branch (Gardiner sign list M1/M3) can be found in both commercial/official texts (Hatshepsut reliefs, Serabit el-Khadim stela, Tombos inscription) and in temple laboratories list (Edfu, Philae) and in private contexts (Deir el-Medina ostraca). In the same way, the determinative for the unguent vessel (W22/W23) can be found in both private funerary texts (tomb of Sarenput) and in official inscriptions (Seti I, Karnak). Perhaps unsurprisingly, the mention of *ti-shepes* in religious/literary texts covers almost the half of the documented references to this item, while the rest derive mostly from private tombs inscriptions or official tribute lists.

At present, it appears that there was not a univocal relationship between the chosen determinative and the phase of production/part of the *aromata*. In other words, there is no decisive evidence to support the choice of the sign for tree to determine the word referring to the plant (or its parts) or the presence of the balsam vessel to determine a word for derived products, such as balsam or aromatic

oil. It seems more likely that as the millennia passed words such as *ti-shepes* or *hesayt* can refer to both the raw material and the derivate product without any differentiation, and these terms can signify one or more species of foreign vegetals. Therefore, while it is worth suggesting interpretations for those products from the Egyptological point of view, this direction of research might be most promising if amended. Whatever vegetal species these words could actually represent (if it is logical and reasonable to assume that we have to search for only one species referred by each word), the fundamental aspect of investigation should be oriented more to the *use* to which the Egyptians put those products.

Similarly, it would be of much use to focus additional attention on tracing the origin of some similar species that can be identified with those words. More importantly, the uses and values that they had in the culture(s) from which they derived should be evaluated. To clarify the process of transition of elements from a culture to another, it is necessary to know the “original” meaning or value of an item prior to its transformation or adaption into the “new” culture.

Notes

1. See <http://www.africantransitions.it> for more information about ATrA project, members, events and forthcoming publications.
2. Creasman 2014.
3. See Breyer (2014) and Pirelli (2016) for more detailed analyses of the possibly derivations of the Punt scenes of Deir el-Bahri from the most ancient ones at Abusir; see Creasman (2014) for detailed analysis of the social, political and religious reasons for Hatshepsut’s Punt voyages.
4. Naville 1898.
5. See Dixon (2004), who suggests also that, in order to guarantee the supplies of luxury products from Punt, the Egyptians would supply the local tribes with military hardware (bronze weapons in particular), made of various kind of metal shown also in the Deir el-Bahri reliefs. See also Espinel 2011, 30–41 in particular.
6. Amin 1970; Shinnie 1991; Saleh 1972; Manzo 1999.
7. 2014.
8. Baum 1994; Betrò 1983; 1988; Loret 1894; Germer 2008; Espinel 2011, 64–68; el-Sayed 2011.
9. The location and interpretation of this toponym is still a matter of debate, even if according to the documentation deriving from archaeological excavations at Wadi/Mersa Gawasis it could be placed in the region of the Horn of Africa (Fattovich and Bard 2007). Punt and God’s-Land are often quoted as mythological places in which the gods lived provided with every luxury items, so geographic and mythic elements often overlapped.
10. Naville 1898.
11. Papyrus Salt 825 (Derchain 1965).
12. See Aufrere (this volume) for a clearer idea of the association between divine humors and aromatic products.
13. See Betrò 1997. The erotic aspect of the god’s pleasure connected with the aromatic products from Punt and “*ta-netjer* (God’s-Land)” is stressed and documented very well not only by many Egyptian texts, but also in other cultures and represents another level of the *aromata* world.
14. Aufrere this volume.
15. Baum 1994.
16. Baum 1999, 425.
17. Baum 1999, 422–424.
18. Betrò 2015.
19. Baum 1999, 426–427.
20. Betrò 1993, 20.
21. Baum 1999, 423.
22. See De Romanis 1996, 42–48 for the possibility of the linguistic derivation of the Greek term *cassia* from the ancient Egyptian word *hesayt*.

23. Deines and Grapow 1959, Loret 1887.
24. Helck and Otto 1992.
25. Luchtrath (1988).
26. See Germer (2008), 151–152 for the medical application of *ti-shepes*.
27. Bresciani 1997.
28. Davies 2008.
29. See Bresciani 1997, 451–452, where the author states also the importance of containers such as sacks and baskets for the identification of a wooden product, not a resinous one.
30. Manniche 1999.
31. See Kaura 1999, 238–239 for *ti-shepes* and in general for the production process and ritual meaning of the sacred oils in Egypt.
32. Loret 1887.
33. See Luchtracht 1999, 97–145 for the *kyphi* recipe from the Edfu temple.

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Chapter 5

Uresh-nefer's image of the World

Dieter Kurth

Uresh-nefer was an Egyptian priest who lived in the Thirtieth Dynasty or somewhat later, which roughly corresponds to the second half of the fourth century BCE. His sarcophagus was found in Saqqara, not far from Egypt's modern capital, Cairo, and since 1913 it has belonged to the collection of the Metropolitan Museum of Art in New York.

The rich and elaborate decoration of this sarcophagus had attracted Egyptologists' interest soon after its discovery, especially the representation that dominates the top of the sarcophagus (Fig. 5.1).¹

Regarding the well-known image of the sky goddess Nut bending over the earth as well as the flying sun discs and the stars, every Egyptologist should agree at once that this should be a representation of the world seen with the ancient Egyptians' eyes. But the interpretation of the whole is difficult – with its many dissimilar but intricately related details – and has been the source of much debate.

Scholars' attention was mostly drawn to the large circle in the middle that fills the space between the legs and arms of the goddess Nut. Some argued that the picture represented the surface of the earth, and that, in order to be understood correctly, it should be looked upon as a horizontal disk; this statement is supported by the fact that the ancient Egyptians never depicted a thing in a three-dimensional style.

Others proposed that we should take the picture just as we see it before our eyes. This interpretation was supported and advocated with good arguments by A. H. Martin.² Martin opened the way for a better understanding of the image in question – although I cannot agree with all his suggestions. At the same time I have to confess that, even if I do improve our understanding of this puzzling figure, there are still some details open to question.

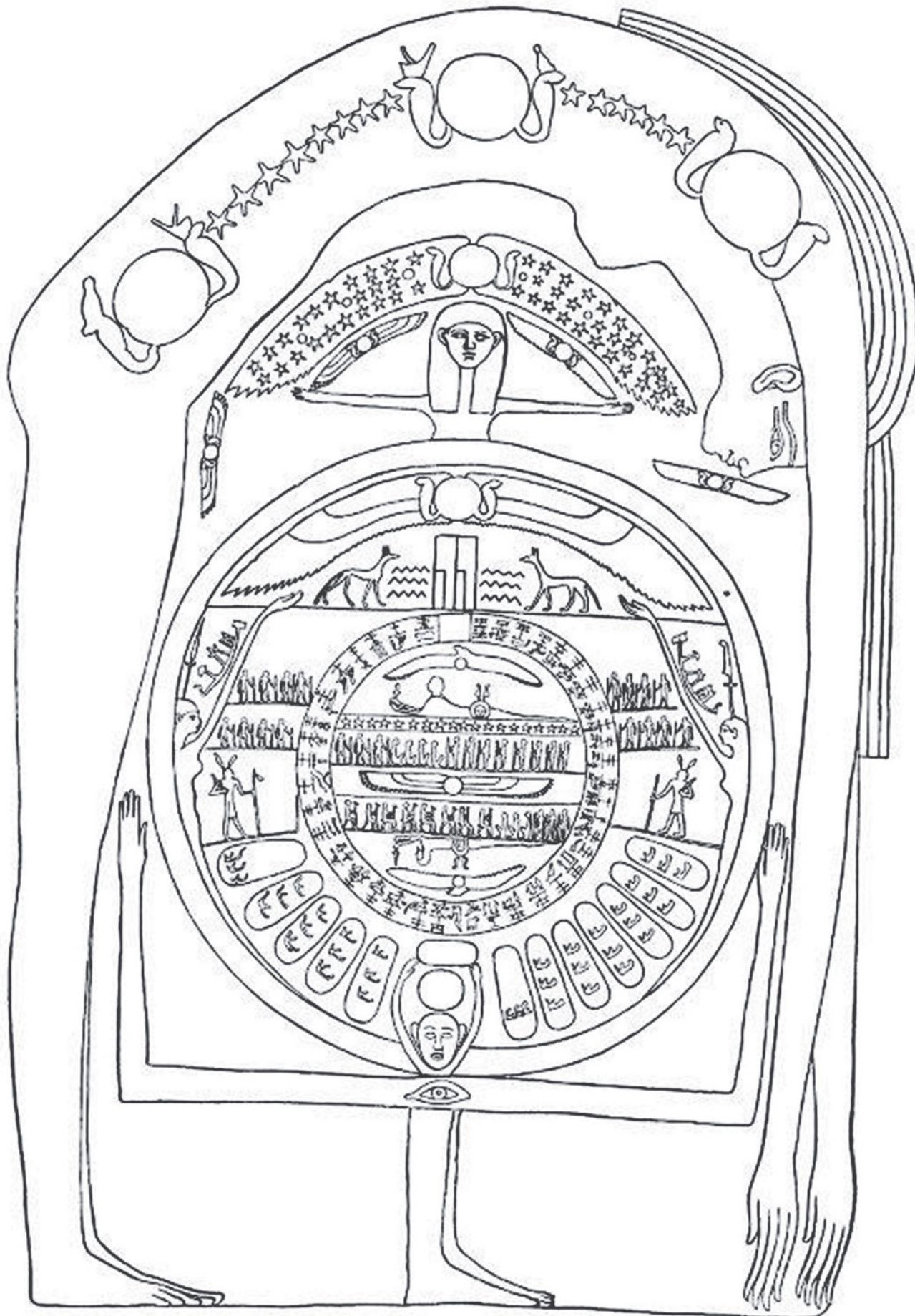


Fig. 5.1. The dominating representation on the lid of Uresh-nefer's sarcophagus (from Ransom 1914, fig. 3).

Let us begin with the goddess Nut who frames the entire representation, with her feet and legs on the ground and thus forming the celestial vault with her body. There are no doubts as to the meaning: on the left side we see the winged disk of the sun born by Nut at dawn in the eastern horizon. Then the sun, flanked and protected by two uraeus-snakes, moves forward over the sky, reaches its climax at noon and sinks down in the evening until it enters Nut's mouth on the right side, in the western sky. After that, in the night, it wanders through Nut's body toward the place of its rebirth in the morning, unseen by those who live on the earth, a passage indicated by the stars on Nut's body. Such a reading of this representation has shown that all its elements, although fixed in their places, are arranged in this peculiar way in order to suggest the permanent motion of the sun through its daily cycle. It is useful to keep this in mind if the following parts of the image are to be understood.

A smaller representation of the goddess Nut is shown below, standing upright and facing the viewer, her body being divided into two parts by the large circle (mentioned above). This figure does not represent the east-west orbit of the sky; rather, it indicates the movement of the sun between the solstices, which takes place between summer and winter when the daily path of the sun shifts from north to south and from south to north within the course of one year.

The goddess Nut looks to the south, since this was the ancient Egyptians' most important cardinal point. So we have to imagine that Nut's body in reality bends over the earth and that her extended arms touch the ground in the south, her feet standing in the north. The winged sun above her head represents the weak sun of the winter solstice, when the visible path of the sun over the sky is much shorter than in summer. At the same time this winged disk – bearing many stars indicating the longer nights and only six little sun disks indicating the shorter days – is an image of the southern sky; the two little winged disks beneath it indicate the two halves of the day, before and after noon. The sky presented in the form of a pair of expanded wings may call into question the correctness of this interpretation, but there are other examples of this astonishing conceptualization of the sky.³

It can be recognized, without much risk of being mistaken, that the two figures of Nut represent the two principal movements of the sun, one between east and west during the *day* and the other one between south and north in the course of the *year*.

Now to the large circle. It is held by two big arms in a gesture that corresponds to a hieroglyph that has the sound value *k*. The Egyptian word *k* is untranslatable. It comprises the notion of a primeval power that already existed at the beginning of the world. It nourishes the living, and each of them has a share of it. Just to give an approximate idea of its meaning, one could perhaps render the word *k* with "root," and within this special context I am inclined to render it as "the root of the world."

The single hieroglyph of the eye, which is inscribed in the middle of the aforementioned pair of arms, means *jrij*, make. *Iri* or *Ir* is the name of an Egyptian god who created the world.⁴ So we can deduce safely that this circle represents the world, held in its position by the creator god's powerful arms, everlasting from the beginning until the end of time.

The circle itself is defined by two concentric lines. A horizontal line separates the upper quarter of the circle from its rest. Two jackals stand on this line and before each of them we see the hieroglyphs of the word *mw*, water and the word *ht*, house. Above it there is a winged sun disk spreading out its wings so that they nearly touch the ground on both sides. As shown before, the winged disk represents the visible sky stretching out between the eastern and the western horizon, from which and to which the barge of the sun is drawn by jackals, as appears in many ancient Egyptian representations. As concerns the two houses, they cannot be explained with certainty, but perhaps represent two different spheres of the sky. The decoration of this part of the circle, taken as a whole, evokes round-topped stelae and their various kinds of decoration, the interpretation of which is sometimes rather difficult.⁵

Below the horizontal separating line the netherworld begins. On both sides the hand of a goddess reaches out of the netherworld into the world of the living. The one on the left bears the hieroglyph of the east on her head, which makes clear that she is just lifting the ship of the sun up to the morning sky, where the jackal will start dragging it to the west. On the right side the goddess of the west, easily

to be identified by the corresponding hieroglyph on her head, receives the sun god's ship in order to hand it over to the jackal that is ready to drag it back to the east.

Close to each sun boat we behold eight standing deities. Each of them is holding a long staff in his hand. The rest of their iconography is not clear, but the number of each group, namely eight, must mean that they are the eight ancestor gods who represent the Nun, the primeval ocean that is crossed daily by the sun god Re in his solar barge.

The legs of both goddesses reach far down into the netherworld, merging into the periphery of the circle. This conveys the idea that the barge of the sun god sinks down into the lower world, traverses it and rises from its deepest parts every day.

Next to the legs of both goddesses are seen 12 ovals. Each of them contains the figures of three sitting gods, which results in 36 gods all together. As Martin has pointed out correctly, these gods represent the 36 decans (constellations or groups of stars). Since each of them embodies a period of ten days, they add up to 360 days, which – augmented by the 5 epagomenal days – give the number of days in a year.

This confirms the interpretation of the standing goddess Nut, because the 36 decans – in form of the corresponding constellations of stars – arise in the eastern sky one after the other in the course of the *year*, after having passed through the netherworld. Further support of this interpretation is given by the hieroglyphs on top of the head and between the arms of the god *Jrj*, the creator. The hieroglyphs read *šnw jtn*, the circle of the sun disk, and the position of this legend just between the decans corroborates that this part of the image deals with the sun god's journey during the year.

On a slightly inclined separating line above the ovals and on each side, the upright figure of a god is found. In one of his hands he is holding a staff,⁶ and his head is surmounted by two feathers. There are good reasons to identify this god with Anedjti, who is closely related to Osiris, the king of the realm of the dead.⁷ One of the reasons is the god's iconography.⁸ The other one is his epithet "Chief of his provinces,"⁹ and indeed, both figures of the god are oriented to the inner circle that contains the symbols and hieroglyphs of Egypt's 39 traditional provinces, each of them placed on a standard, those of Upper Egypt on the left (east), those of Lower Egypt on the right (west). Assigning the Upper Egyptian provinces to the east and the Lower Egyptian provinces to the west follows the general rules.

That the provinces of Egypt are situated in the netherworld and adjacent to the 36 decans may surprise and raise doubts about the correctness of this interpretation. But it is known from other sources¹⁰ that each province of Egypt was attached to a certain sector of the celestial vault and that it also had a counterpart in the netherworld. So, we *can* conclude that both – the decans as well as the provinces of Egypt – played an important role in the ancient Egyptians' conception of the year and its moving subdivisions.

It is significant that there is a numerical difference between the 39 provinces on this sarcophagus and the 36 decans. It is true that the number of these provinces was never 36, although they changed in the course of time between 38 and 42, the latter being canonical in the Late Period. This difference, however, can be explained easily: it is an ideal equation that disregards the small difference, for which many comparable instances can be quoted.¹¹

The doubts will decrease further if we consider the legend inscribed in the middle of the ring that contains the provinces, just above the face and the arms of *Jrj*, the creator god. The hieroglyphs are written upside down and read: *wśjr dr wr*, Osiris, the great domain. It confirms that Osiris was believed to be the lord of nearly the same number of provinces in the netherworld as in the land of Egypt, where every province claimed to possess one part of his body.¹² Moreover, it would seem that the whole netherworld was regarded as the Osiris's body.

The contents of the inner circle are divided into three parts. In the middle there is a winged sun disk that represents the sun moving at night through the subterranean world. In the upper third, and above the starry sky of the netherworld, is the figure of a god lying stretched out on the ground, his head¹³ lifted. He is holding an indistinct object in his hands, and the place of his hips is occupied by a face

surmounted by two feathers. Above this god we discern a falcon hovering with outstretched wings and holding a tiny sun disk.

There can be little doubt about the interpretation of this scene: It shows the god Horus, the son of Osiris, whose *b3* has just emerged from his father's body.¹⁴ Horus is justified, he is the legitimate son of his father as it is indicated by the two feathers.¹⁵ The sun disk between the wings of the falcon is still small, but the daily miracle of the sun's rebirth in the netherworld, according to the myth of Osiris, Isis, and Horus, has already taken place. The conspicuous shape of the face right in the middle of Osiris's body indicates that it is the face of the god's *b3*.¹⁶ His appearance within this scene fits well into the general concept of the *b3* since the *b3*, in its most abstract meaning, represents the capability of a human or divine being to move and to cross all kinds of borders.

The scene is repeated upside down in the lower third of the inner circle, perhaps in order to convey the idea that the rejuvenation of the sun is a continual process, in the course of a day as well as in the course of a year, since both cycles are interconnected and inseparable. Another feasible interpretation might be that the upper scene shows the upper part of the Dat (*d3t hrt*) i.e. the dark starry sky, and the lower scene shows the lower part of the Dat (*d3t hrt*) i.e. the netherworld.¹⁷

The rest of the decoration consists of two lines of gods. In the upper line, on the right, we can easily identify eight equally shaped gods by their iconography: They are eight figures of the god Ptah, standing upright. We know of eight Ptah-gods as hypostases and helpers of the mighty creator god Ptah who created the world in primeval times¹⁸ and creates it every morning anew. And it is also Ptah who lifts up the sky for the sun. Furthermore, Ptah's outstanding role as a creator is not the only reason for his appearance in the decoration of the sarcophagus under question: this sarcophagus was found in Saqqara and there, in Egypt's ancient capital, Ptah was the principal deity.

As to the other gods in the two lines, I have no idea at all how to identify them, because their iconography is not distinctive. I ask myself, however, whether or not they belong to the 51 deities of Memphis represented in the temple of Abydos,¹⁹ but this is a mere guess.

What could have been the reason for the priest Uresh-nefer to have the lid of his sarcophagus decorated in this particular way? Firstly, perhaps Uresh-nefer wanted to ensure that his destiny in the afterlife would be to sit in the barge of the sun, to be in company with the sun god Re and to follow him on his eternal voyage over the skies. Secondly, he wanted to express this voyage in a more elaborate and more exact way than is known prior. And that is why he combined both cycles, namely the daily and the yearly cycles of the sun, within a single representation.

Focusing attention again on the big circle, it is reasonable to wonder if Uresh-nefer's attempt to show the world in a more precise way could have led him so far as to discover the spherical form of the earth. There is a scientific debate regarding the question of whether or not the ancient Egyptians had already discovered that the earth is nearly formed like a globe. Christian Leitz²⁰ has offered the theory that the Egyptians should have had an idea of the spherical form of the earth since the New Kingdom at latest. Some scholars have accepted Leitz's arguments, others have rejected them.²¹ If Leitz's theory is correct, the Egyptians would have known more than a millennium before the Greeks²² that the earth is not formed in the shape of a disk but in the shape of a globe.

Yet, it seems more reasonable to propose that this question is not addressed by the image under consideration because the learned priest who designed it and handed it over to the artist did not speculate upon the shape of the world. His main interest was to visualize the course of the sun within

the day and the year for the benefit of the deceased who wanted to follow the sun in all its movements, by day and by night.

The outcome of the learned priest's efforts was the ingenious integration of the knowledge of his time into a unique representation. The circle forming part of this representation is only the logical and consistent continuation and pursue of the visible vaulted path the sun describes on its way between the horizons. The priest may have imagined that the way of the sun through the netherworld would have the same form as the one it described during the day – and thus he would have extended and completed the visible arc and segment of the circle to an entire circle.

The unequal parts of the circle, a small one for the daily way of the sun and a large one for its voyage through the netherworld, may again raise doubts about the correctness of the interpretation offered here. I cannot refute this counter-argument. Nevertheless, it can be argued that the priest's interest was not scientific in a modern sense and that in Egyptian art the important things have always been represented bigger beside the less important, regardless of the real proportions – and what could have been more important for the deceased than the mysterious world beneath the earth.

It must be mentioned that a fragment of a rather similar representation of the world has come to light.²³ It was compared with the image in question and discussed by J. J. Clère, who correctly pointed out the correspondences as well as the obvious differences between them. As to the latter, the fragment leaves out some of the nomes (districts) and the figures in the ovals do not represent the 36 decans but foreigners. The differences are, perhaps, partly due to the normal range of diversity within the ancient Egyptians' religious belief and cultural creativity, and partly to the distance in time since the fragment is considerably older than the other representation of the world. Clère's interpretation of the image in question (on the sarcophagus), which was not the focus of his article, differs from that proposed here.

Finally it must be acknowledged that some questions remain without definite answers, but I hope that I was able to put forward some more or less convincing and tenable explanations about this puzzling representation of the world.

Notes

1. Porter *et al.* 1974, 504 (literature up to the year 1973).
2. Martin 1992/1994, 89–106. On p. 105, n. 41, former interpretations are quoted.
3. Petrie 1925, pl. 12, 5 (First Dynasty).
4. Leitz 2002, 439 a and b.
5. Mostafa 1993, 85–98 deals with the different types of decoration in the upper part of round-topped stelae.
6. It is unclear what the other hand is holding. On the left side this object looks like a šhm-sceptre, which mostly expresses the concept of power.
7. As concerns Anedjti and his role as a ruler see Bonnet 1971, 38; Favard-Meeks 1991, 452–458.
8. Montet 1957, 97 (“Palerme”). I take the present form to be a variant.
9. Sethe 1908, 103, §182a (*hrj-tp špwt.f*); 127, § 220c (*hntj špwt j³btt*).
10. Daressy 1916, 1–34; Laskowska-Kusztal 1984, 82–88.
11. So, for instance, some texts speak of an Ennead even if it comprises more than nine deities. See furthermore the 42 provinces of Egypt and the 42 judges who assist at the judgement of the dead, and also the two lands of Egypt and the many cases of dualism; in these cases the number of persons or things often seems to be artificial, merely derived from a given quantity.
12. Beinlich 1984, 305–310.
13. This god is represented twice, here without a beard, whereas on the bottom of the circle (upside down) he is wearing a beard.
14. The same idea is expressed differently elsewhere; see Kurth 2010, 81, n. 545; 189, n. 1206.
15. Seeber 1976, 39, figs 15 and 17.
16. Cf., for example, Gasse 1996, 72; pl. xi.
17. Bonnet 1971, 148–149.
18. Bonnet 1971, 614.

19. Kees 1915, 57–76.
20. Leitz 1991, 101–104.
21. See Krauss 2008, 5–6, who quotes some other participants of this dispute.
22. Westendorf 2002, 106.
23. Clère 1958, 30–46.

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Chapter 6

“They shall come to trade at Iken.” Ports and river in second millennium BCE Nubia

Andrea Manzo

Introduction

The function of the Egyptian fortresses in Lower Nubia and on the Second Cataract has been debated for many years (Fig. 6.1). Although it was clear that these imposing structures, with the possible exception of the northern ones, could not be considered as related only to the need of guaranteeing the security of the Lower Nubian territories conquered at the beginning of the Middle Kingdom, their dimensions remained unexplained for many years.¹ More recently, the increasing awareness of the political and military power and capabilities of the kings of Kush in the first half of the second millennium BCE provided good justification for such an imposing defense apparatus on the southern border of Egypt,² making the explanation proposed by Adams³ relating the fortresses to the Egyptian need for “material hypertrophy” outdated.⁴

The possible commercial function of these structures was also often stressed,⁵ also in light of what is stated beside the defense of the border in the famous boundary stela of year 8 by Senwosret III (quoted in the title of the present paper), which orders that Nubians willing to make trade should be sent to the fortress of Iken, i.e. Mirgissa.⁶ That commercial activities were considered crucial is also evident from passages of the Semna Dispatches (letters reporting the activities that took place in the border region, likely to date to the time of Amenemhat III) mentioning the arrival of Nubians willing to exchange goods at Semna.⁷ L. Török⁸ recently stressed that the mention in the boundary stele by Senwosret III of two fortresses 50 km away from one another suggests they operated as components of a coordinated system. Since at that time Elephantine was still regarded as the southernmost place in Egypt, these points combined should push us to consider the whole of Lower Nubia and the fortresses as a frontier zone with both military and economic-commercial functions.

Both the commercial and military functions of the fortresses were often related to the need to support the boats navigating the Nile through the difficult waters of the Second Cataract. Actually, the fortresses and their garrisons may have played a part in minimizing the kind of problem presented by a stretch of the river characterized by shallow water, rocks and rocky islands. Such conditions created difficulties in the transport of troops during Egyptian military expeditions,⁹ as described in a rock inscription from Uronarti noting the difficult navigation faced by the army of Senwosret III on its way back to Egypt after the campaign of regal year 19 against Kush.¹⁰ There is no need to stress here that both the military activities conducted in the south and the trade activities that crossed the southern border of Egypt necessarily took place via the Nile,¹¹ as it is explicitly mentioned in the Semna Dispatches.¹²

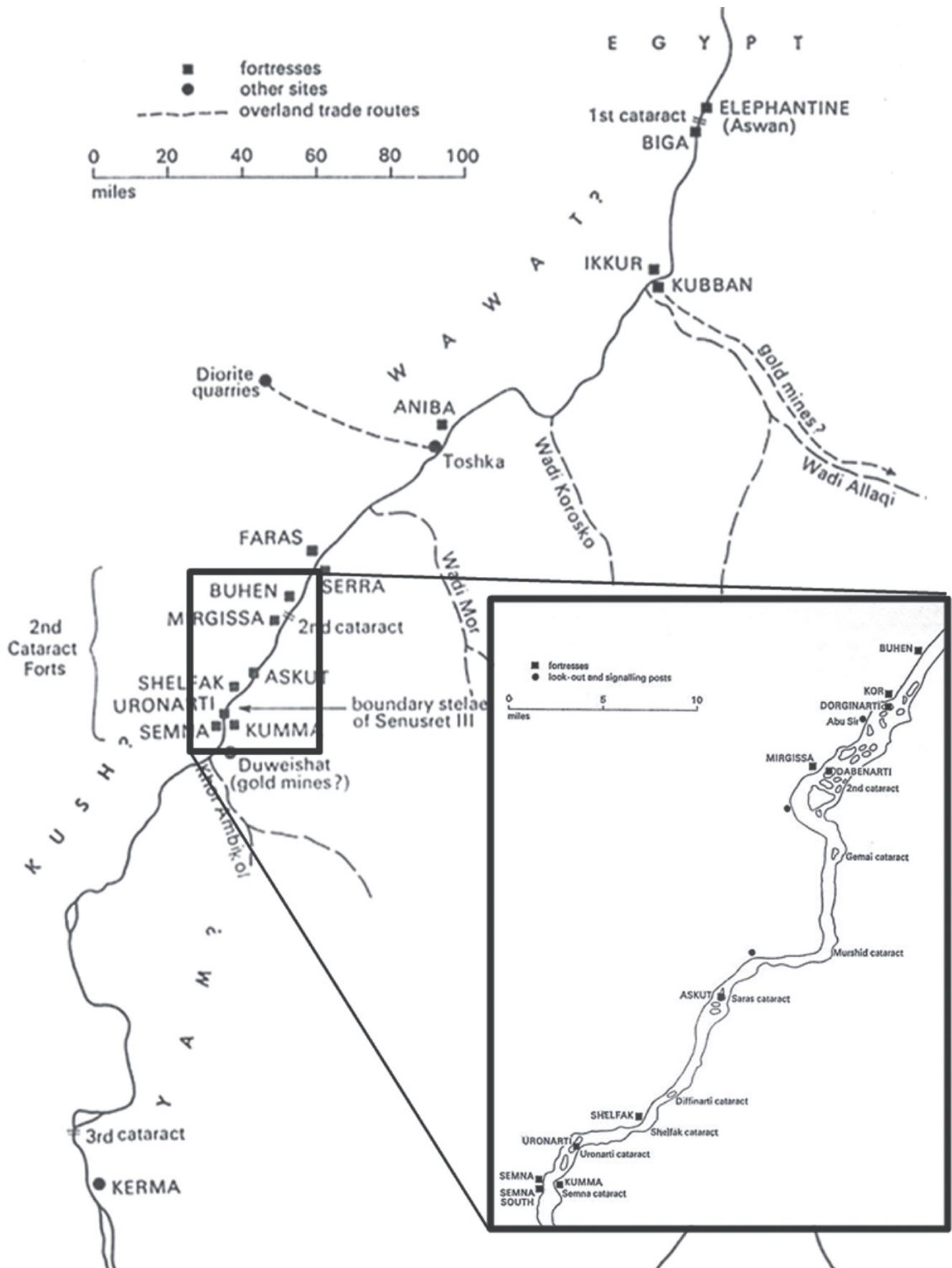


Fig. 6.1. Location of the Egyptian fortresses in Lower Nubia and detail of the Second Cataract area (after Adams 1977).

It is evident that the presence of the Nile should be regarded as crucial for the fortresses in many respects. Water supply of the fortresses,¹³ while perhaps chief among these services of the Nile, was guaranteed through dedicated gates provided with stairs leading to the river.¹⁴ It was not only water

that so arrived via the river, but also the rest of the supplies to and from Egypt. Supplies must have come en masse, as shown by the large number of storage containers made in Egypt discovered in the fortresses,¹⁵ by the dimensions of their granaries,¹⁶ and by the raw material from which a part of their arms were made.¹⁷ Similarly, the military units that periodically rotated to maintain control of the fortresses arrived from Egypt.¹⁸ Of equal importance, the river was crucial for allowing relatively quick communications and exchange of information between the fortresses and with the higher administrative levels in Egypt, as shown by the Semna Dispatches discovered at Thebes.¹⁹

The essential role of the river for the fortresses was exceedingly evident in the case of Askut, one of the most studied fortresses, thanks to the efforts devoted by S. T. Smith²⁰ and to the good preservation of its stratigraphy.²¹ Smith rightly agrees with B. Kemp in stressing that a large percentage of the area of the fortress was occupied by granaries.²² In the framework of the model that considers each single fortress as a functional component of a system,²³ this suggests that Askut should be regarded as a crucial supply station for the rest of the system and possibly for the expeditionary corps crossing the region.²⁴ Moreover, Askut may also have served to regulate the exploitation and management of a gold source to its south, at Khor Ahmed Sherif, on the eastern bank of the Nile.²⁵ But despite that Askut was located on an island, and thus the cereals to fill the granaries, the gold ore, and all needed supplies for the mine(s) *had* to be transported by boat, the harbor of Askut was never properly identified nor studied.

Of course, the relationship of the fortresses with the river was sometimes remarked upon. The presence of harbors and warehouses was occasionally considered as related to their commercial function,²⁶ while their role as interface between caravan and river transportation was also occasionally emphasized.²⁷ However, surprisingly enough, even in the more recent studies devoted to the fortresses and to the rich collections of materials, revealing precious information on their inhabitants and the activities they performed,²⁸ neither the structure/organization of their harbors nor the activities specifically related to the harbors have been assessed. A more systematic attempt to assess these structures in their relations with the river still remains to be conducted. This contribution is aimed at representing a first effort in this direction.

Navigation on the river

A remarkable effect that the system of the fortresses may have had in general is evident by the presence of possible infrastructures. These formed a kind of connective tissue between the fortresses, aimed at facilitating the transit of goods, supplies, information, and people along the river. In the Middle Kingdom, the new infrastructures seem to have been different from the channels that were cut throughout the cataracts since the Old Kingdom (and were still used in the Middle Kingdom in the region of the first cataract, mainly on the occasion of military campaigns).²⁹

The crucial role played by the fortresses in the transit along the Nile in the Second Cataract region is made evident by, among other things, the slipway bypassing the worst rapids of the Second Cataract near the fortress of Mirgissa (Fig. 6.2).³⁰ It consisted of a mud-lubricated roadway reinforced with timber and mudbrick, likely used to transport heavy loads on sledges and to drag boats directly across the silt.³¹ Interestingly, the width of this slipway, ca. 3 m, seems to be suitable for boats similar to those discovered in Dahshur and dating to the reign of Senwosret III,³² while the length of the piers in Buhen referred below may provide a measure of their maximal length. These dimensions seem to be compatible with boats built with wood locally available in Nubia.³³

Moreover, it was suggested that spurs may have been built to close the minor branches of the river in the vicinity of Semna in order to increase the level of the water in the main branch and to make navigation easier. The presence of these structures was suggested by Vercoutter on the basis of the evidence of the silt deposit accumulated on the glacis of the fortress of Semna South, upriver of the supposed spurs (Fig. 6.3).³⁴ It was also remarked that the very high levels of the river recorded in the rock inscriptions near the fort of Kumna³⁵ are not explainable by climatic causes and are not recorded elsewhere for the Middle Kingdom (Fig. 6.4).³⁶ If such high levels were somehow real, the ruin of several downstream fortresses could be expected.³⁷ These spurs may have been built at the time of

Amenemhat III, when the recording of the Nile levels started at Semna³⁸ despite that the fortress itself was built by Senwosret III. The main goal of these hypothetical spurs may have been to facilitate the navigation through one of the most problematic portions of the Nile and at the same time to exert a tight control over it.³⁹ More recently, some doubts were cast on Vercoutter's hypothesis,⁴⁰ and climatic conditions were suggested as a possible cause of such high levels of the river.⁴¹ Nevertheless, the explanation of the fact that the records of the levels of the Nile started at Semna-Kumna with Amenemhat III is still not fully satisfactory. The silting of the basin south of the hypothetical spurs is also undeniable,⁴² as it made unusable the protected passage for watering of the fort of Semna South (Fig. 6.3).⁴³ Moreover, any doubt cast on the technical viability of the hypothetical spurs⁴⁴ can today be reconsidered in the light not only of other – although smaller – spurs in different sectors of the cataract (e.g., northeast of Mirgissa)⁴⁵ but also of the jetty built at Wadi al-Jarf on the Red Sea coast, which demonstrates that the Egyptians had the technical capability to build partly-submerged structures by the Fourth Dynasty⁴⁶. Unfortunately, the area of Semna-Kumna is now completely flooded by Lake Nubia/Nasser; therefore the only way to try to collect more data, i.e. the organization of further geoarchaeological investigations in the field, is not viable. Nevertheless, it should be stressed that the strict monitoring of the level of the Nile in this specific sector of the Second Cataract may be considered related not only to the prediction of agricultural productivity on the basis of the level of the river, as is sometimes suggested,⁴⁷ but also to the monitoring of the conditions of navigability of the river.⁴⁸

The location of complementary fortresses, such as Semna South and Semna West immediately upstream and downstream of the huge rocky bank, almost completely obstructing the river in the southern sector of the Second Cataract, may suggest that they played a role in facilitating the transit in this difficult stretch of the Nile. Perhaps commodities may have been unloaded from the boats on one side of the rocky bank and moved to the other side by donkey caravans to avoid the rapids, especially in the periods of low water level (Fig. 6.5). If the above described spurs were actually built during the reign of Amenemhat III, this strategy may have been adopted when the spurs were not yet working (at the time of Senwosret III?). Alternatively, if, for some reason, the artificial system meant to raise the level of the river was not working properly, the transshipment strategy may otherwise have been adopted. Thus, the linear defenses recorded near Semna South and Semna West on the western bank of the river, and perhaps extending almost to Uronarti to the north, may be related to the need to move traded goods by caravans along the Nile in this specific length of the river, where navigation was more difficult.⁴⁹ Similar linear defenses perhaps related to similar needs were also recorded in an analogous situation near the First Cataract, on the eastern bank of the Nile (Fig. 6.6).⁵⁰ In the region of the First Cataract, the attention paid to the management of navigation is perhaps also shown by the titles related to harbors, boats, and bank of the Nile that the governor of Elephantine Sarenput I held during the reign of Senwosret I.⁵¹

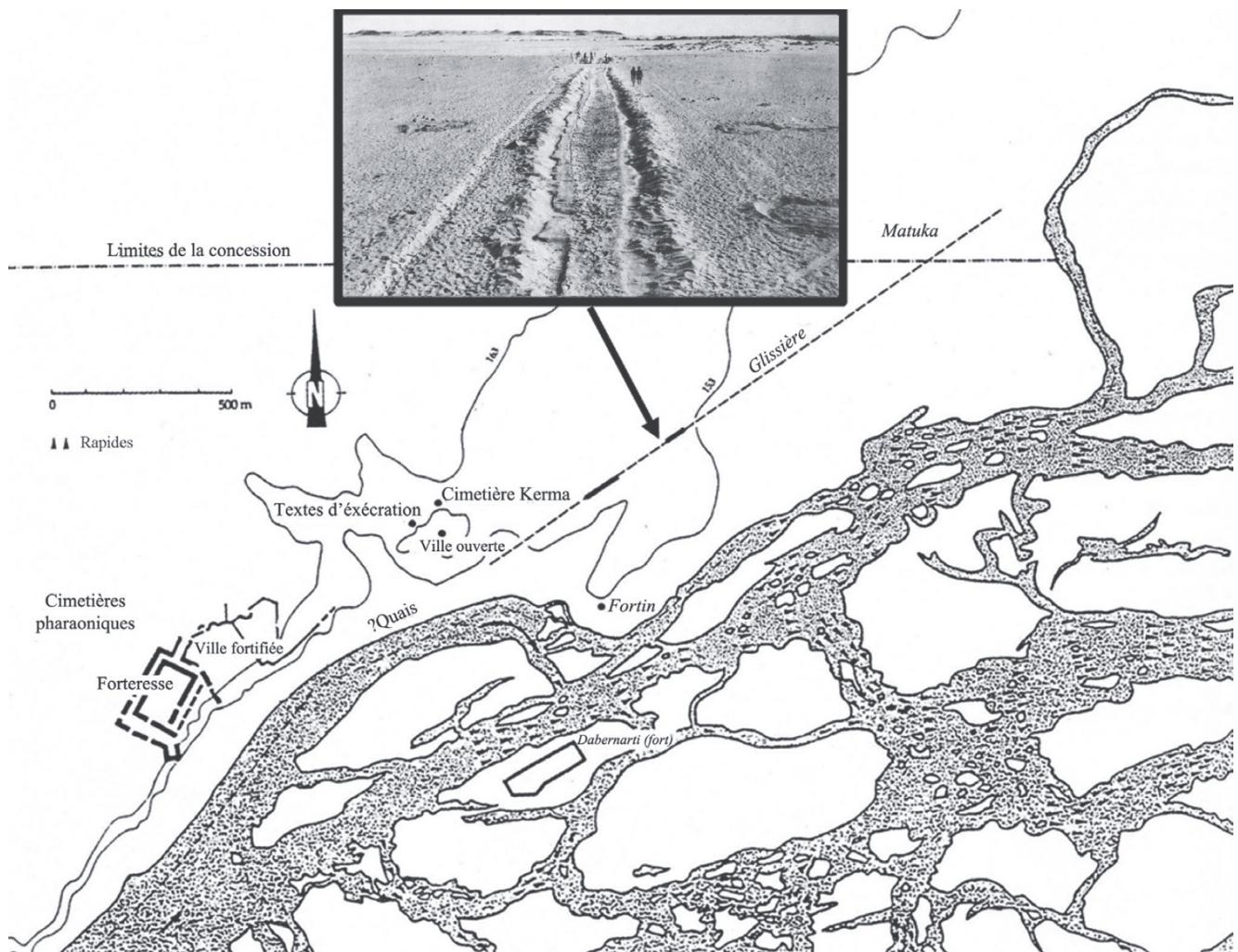


Fig. 6.2. Map of the area of Mirgissa, location and view of the slipway during the excavation (after Vercoutter 1970).

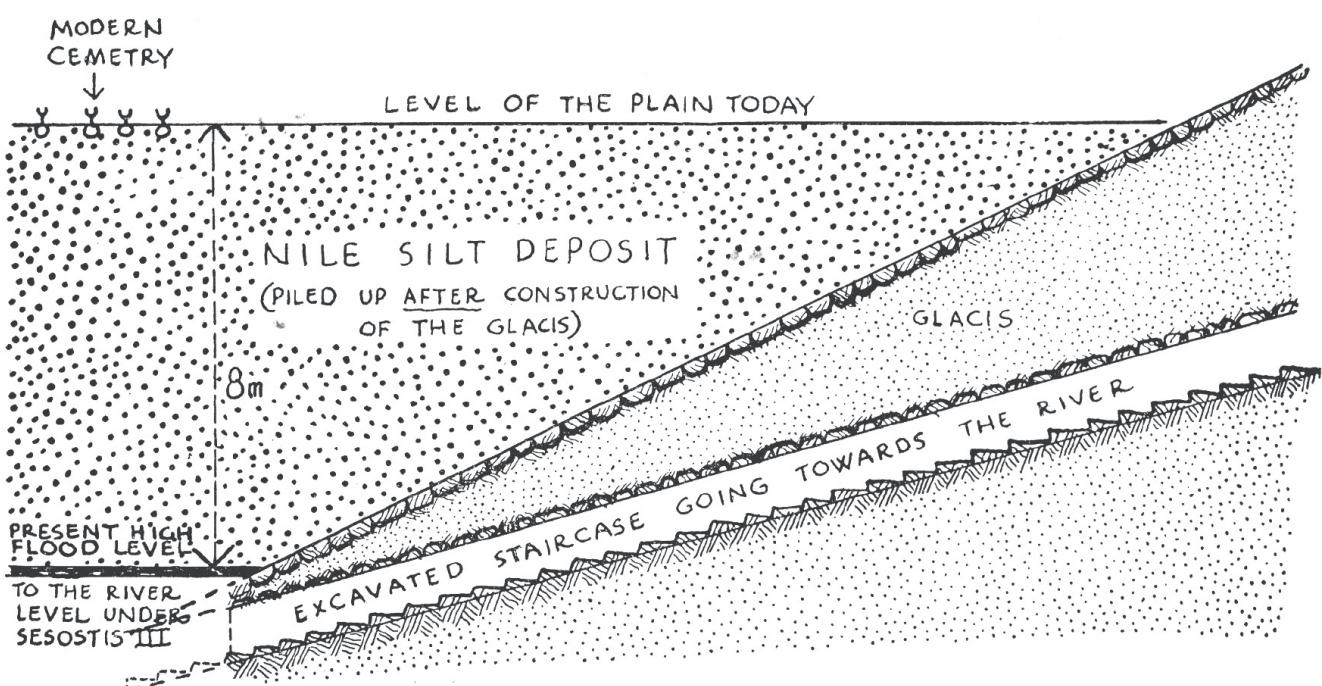


Fig. 6.3. Schematic profile showing the silt deposit accumulated on the glacis of the fortress of Semna South and making unusable its passage for watering of the fort (from Vercoutter 1966).



Fig. 6.4. Rock inscription marking the level reached by the flood near the fort of Kumna in a regnal year of Amenemhat III (from Vercoutter 1966).

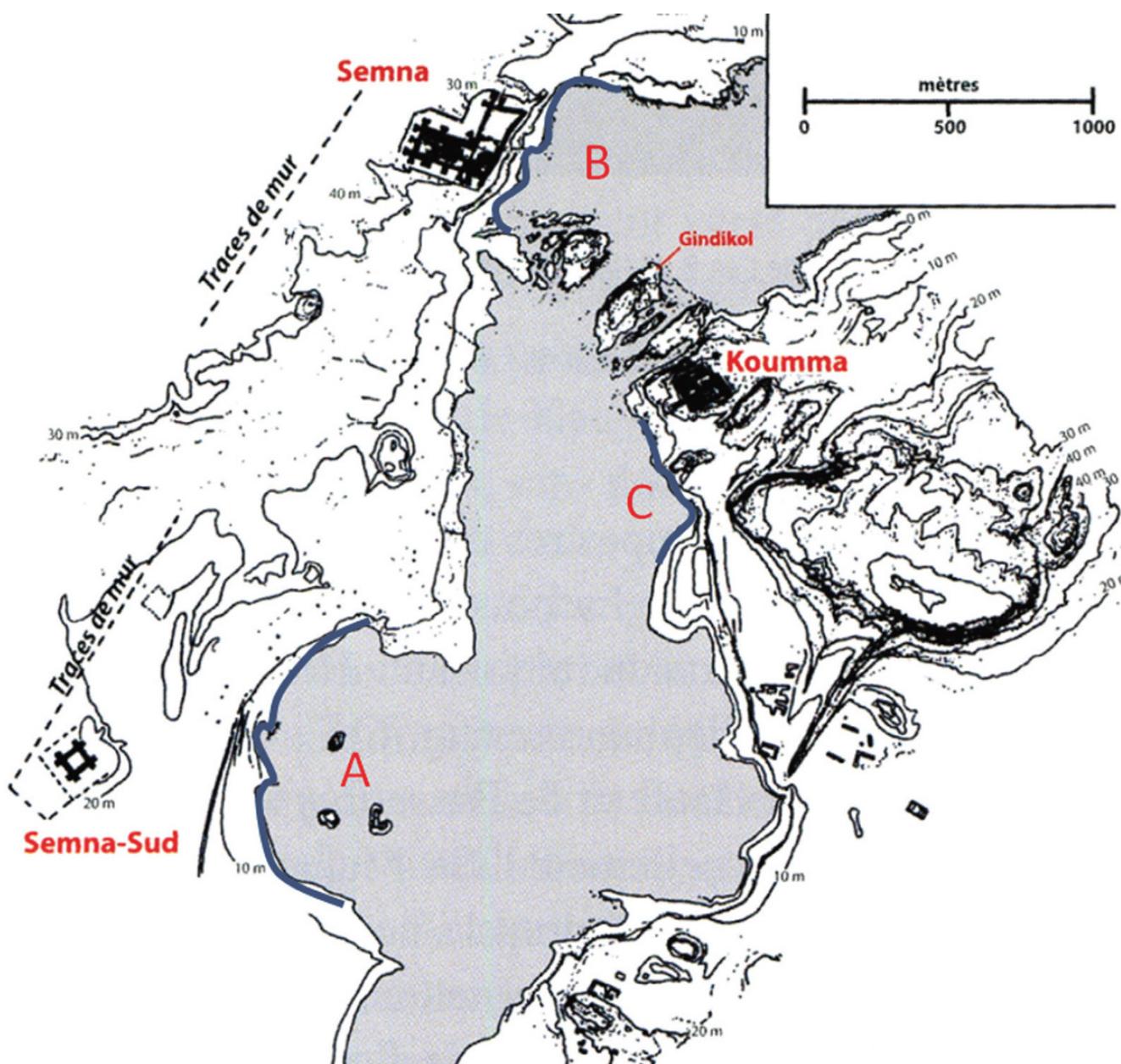


Fig. 6.5. Map of the southernmost sector of the Second Cataract near Semna showing the linear defenses on the western bank of the river as well as the large bays upstream (A) and downstream (B) of the rapids and a smaller mooring area near the fort of Kumna (C) (red highlights) (after Obsomer 2007).

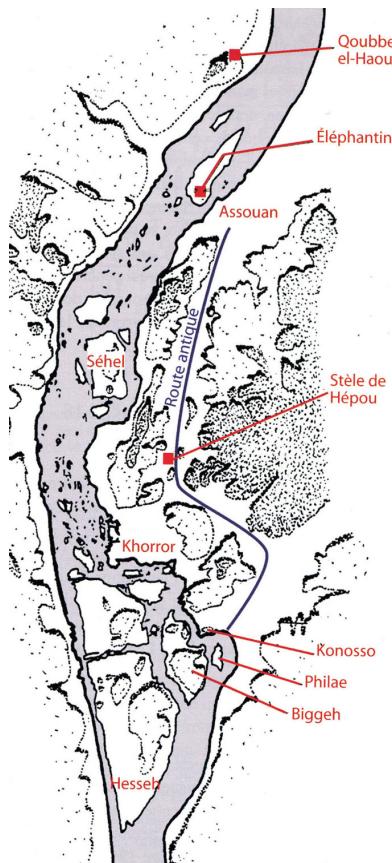


Fig. 6.6. Map of the region of the First Cataract showing the linear defenses on the eastern bank of the Nile (from Obsomer 2007).

The control of trade and navigation on the river

The facilities such as the above described linear defenses – and the possible spurs – may have been multifunctional, both for the protection of commodities and to their control. Actually, in the model proposed by Smith⁵² of the organization and management of the trade in the system of the fortresses of the Second Cataract, Semna is crucial in the light of what is said in the Semna Dispatches regarding the arrival of Nubian merchants sailing from the south. In particular, as said above, Semna may have provided support and facilities for the transfer of commodities from the Nubian boats to the Egyptian ones or to caravans of donkeys. This transshipment may have taken place near a harbor, perhaps corresponding to the upper pool not far from the Semna South enclosure (Fig. 6.5, A). Apparently, Semna South was not inhabited permanently and may have been occupied only in special circumstances,⁵³ perhaps related to the arrival of caravans or boats. The commodities may have been transshipped in order to be brought to Semna West and from there through the nearby lower mooring area immediately downstream (Fig. 6.5, B) to Iken, i.e. Mirgissa, as indicated by the boundary stele of Senwosret III found in the Semna West fortress itself.⁵⁴ Of course, not only the specific commercial function of Semna but also the role of Mirgissa described in that stele is related to the control of the trade of southern commodities, which was directly managed by the state.⁵⁵ Perhaps before the establishment of the frontier at Semna-Kumna these functions were fulfilled at Buhen.⁵⁶

Thus, a further important element in the Egyptian policy for Lower Nubia may have been represented by the efficacy of the control of the movements of people and commodities. If the fortresses and the linear defenses allowed or facilitated the control of the movements on the banks of the river, navigation was closely watched. Navigation would have come under scrutiny not only from the fortresses themselves but also from guard posts, usually consisting of a few simple and small huts situated at or near points that allowed a very good view of the channels of the second cataract.⁵⁷ These guard posts may have represented the fluvial equivalent of the desert patrols mentioned in the Semna Dispatches, which controlled the movements of nomads along the desert borders of Lower Nubia in the same period.⁵⁸ Indeed, this control of navigation on the river may have been crucial both in the

framework of the Egyptian state regulated long-distance trade and as a component of a strategy aimed at securing the border area.

The control of navigation may have been supported not only by infrastructures on the banks of the Nile but also by patrolling on the river. However, no direct archaeological evidence of such a practice remains, nor should it be expected. Nevertheless, some meaningful elements can perhaps be identified in the armory of the fortress of Mirgissa, possibly dating to the Thirteenth Dynasty and identified in the northern corner of the fortress, not far from the gate allowing access to the port area located to the north of the fortress.⁵⁹ A concentration of triangular, round-topped, limestone slabs, ca. 20 cm thick with a hole near the rounded corner, were found there associated with spear and arrow heads, and were interpreted as lasts upon which hide shields were shaped (Fig. 6.7).⁶⁰ Furthermore, the excavator remarked on the similarity of their shape with that of the votive anchors in the Temple of the Obelisks in Byblos, but he considered the kind of stone they were made from not suitable for use as anchors and the general context in which they were found at Mirgissa not congruent with the presence of anchors.⁶¹ Nevertheless, the discovery of similar limestone objects which were surely used as anchors at other sites including, e.g., Mersa/Wadi Gawasis, the Middle Kingdom harbor on the Egyptian Red Sea coast⁶² strongly supports the idea that the stone slabs from the armory of the fortress of Mirgissa could have served as anchors. If, as seems to be the case, these objects were anchors, they were almost certainly used in river navigation. Their physical association with the deposit of weapons of the fortress may suggest that the equipment for navigating the Nile was considered a part of the armament of the fortress. Taken all together, this strongly supports a hypothesis that a military flotilla (of size unknown) was patrolling the Nile. Based in the fortresses, it would have been an essential component of the military system of control and monitoring the southern border of the Egyptian state. All of which may somehow be reflected in the military titles related to the fleet recorded in the Egyptian inscriptions in Lower Nubia dating to the Middle Kingdom.⁶³ The efficiency of the Egyptian control of the navigation on the river is indirectly demonstrated by the lesser complexity of the defense line on the side of the river characterizing several fortresses.⁶⁴

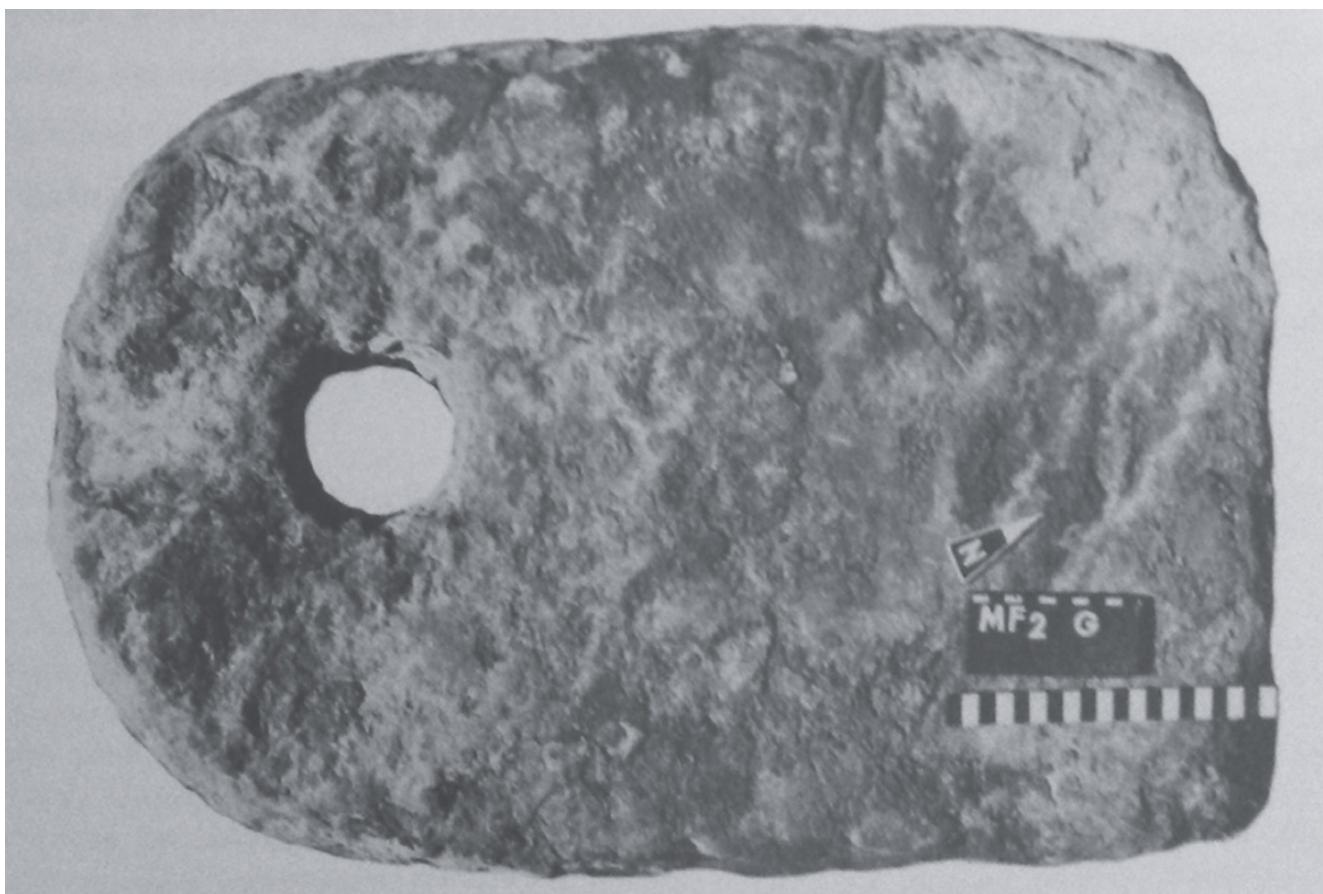


Fig. 6.7. Limestone anchor from the armory of the fortress of Mirgissa (from Vila 1970).

The harbors of the fortresses

Despite that most of the fortresses, with the notable exception of Uronarti and Shalfak,⁶⁵ disappeared under the water of Lake Nubia/Nasser decades ago, some remarks can be made based on their parts or structures related to the harbors that were investigated.

It was suggested that Aniba, one of the earliest Middle Kingdom installations in Lower Nubia, may have developed from a fortified harbor or mooring place.⁶⁶ In later phases, two elements were added: a harbor wall with registration of the level of the Nile in the 6th year of Senwosret II and a terrace characterized the stone-built quay of the fortress accessed through the south gate, protected by spurs extending from the main fortified enclosure to the Nile and perhaps even extending into the river to form a sheltered mooring area.⁶⁷ At least by the New Kingdom, the terrace was characterized by a stairway leading to the Nile.⁶⁸

Buhen, too, characterized by a quite regular perimeter such as found at Aniba, may have been established for a similar reason. Buhen was located in an area where several routes crossed the desert, west of the Nile, and reached the river, making it an ideal terminal where traded goods and supplies could be passed from caravans to boats and vice versa.⁶⁹ This may have also been the aim of the Old Kingdom town, ca. 250 m north of the Middle Kingdom fort, whose harbor facilities were unfortunately not investigated.⁷⁰ In the case of the Middle Kingdom fort, apparently, a natural harbor was not available, and for this reason two jetties of at least 21 m in length, accessed through two elaborated gates, were built.⁷¹ Perhaps this apparently unique solution among the Second Cataract forts was aimed at creating a protected mooring area due to the absence of a natural bay.⁷² Inside the fortified enclosure, the granaries⁷³ and the so-called Southern Temple, perhaps to be identified with the Middle Kingdom temple,⁷⁴ were located not far from the northern river gate providing access to the northern pier (Fig. 6.8).

At Mirgissa there is no evidence of piers, but a large bay north-east of the fortress represented a natural harbor. Embankments covering the riverside were built there and consisted of roughly shaped stones and some mud structures, brought to light during excavation west of the present bank of the river (Fig. 6.9, A–B).⁷⁵ Unfortunately, at Mirgissa the areas closest to the Nile were extensively damaged by floods, but the storerooms may have been located there, as they were not identified in other sectors of the investigated area or inside the fortified enclosure.⁷⁶ Also, a temple may have been located there during the Middle Kingdom.⁷⁷ The northern limit of the harbor was protected by a small fort, which guarded the terminal point of the nearby slipway (see above), while access to the harbor from the fortress was through the Northern Gate, i.e. the main gate of the fortress.⁷⁸

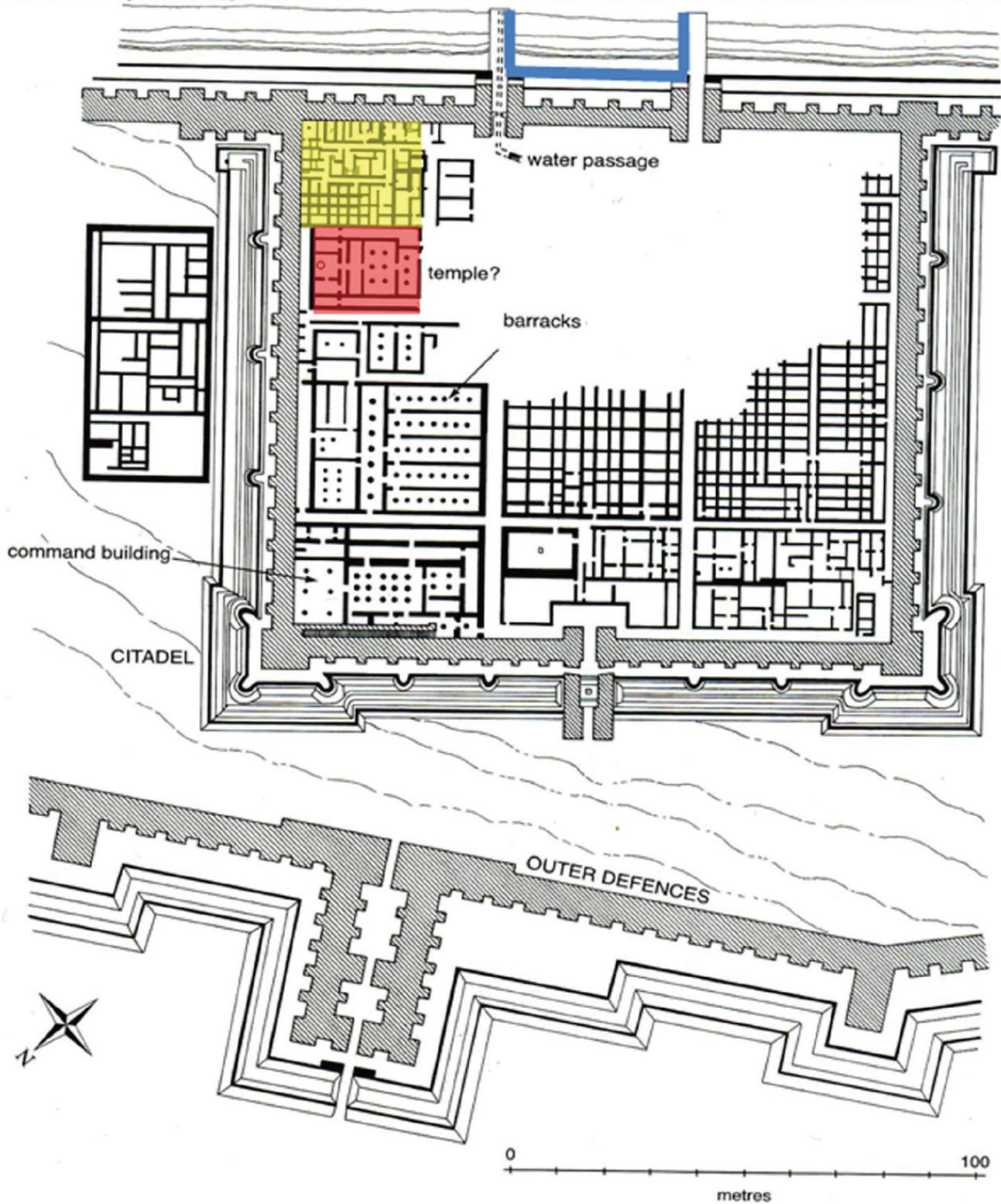


Fig. 6.8. Map of the fortress of Buhen: harbor (blue highlight), granaries (yellow highlight), and temple (red highlight) (after Kemp 2006).

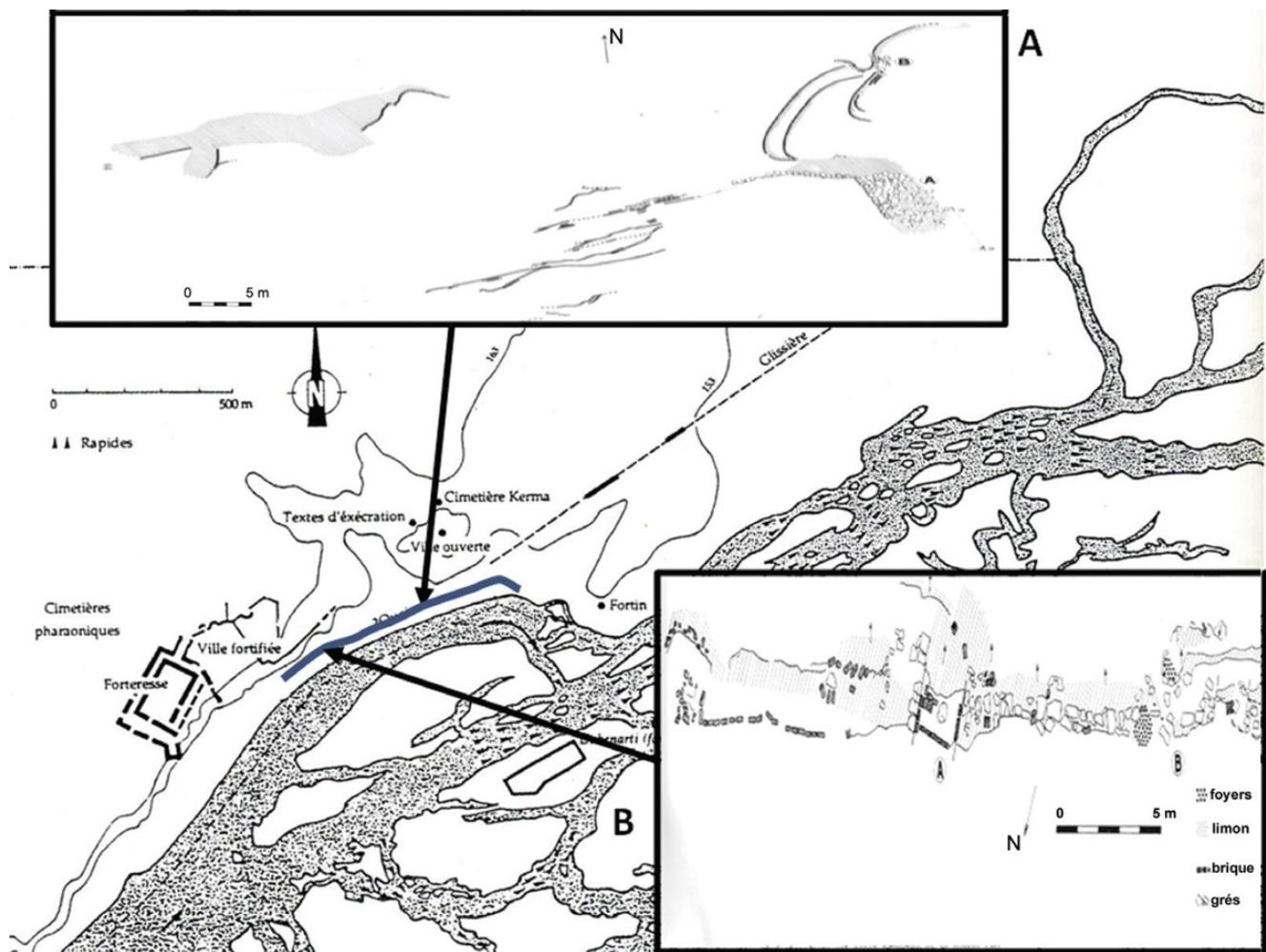


Fig. 6.9. Map of the area of Mirgissa, location of the natural harbor (blue highlight) and details of the stone embankments with mud brick structures brought to light in excavation units M II (A) and M XVIII (B) (after Vercoutter 1970).

At Serra East, a basin cut in the riverside with edges marked by stone retaining walls formed a kind of internal harbor, ca. 40×15 m and of unknown depth (Fig. 6.10).⁷⁹ East of the basin, on the bedrock forming the embankment of the harbor, traces of kilns for pottery production were recorded,⁸⁰ suggesting that activities needing a large number of containers may have taken place in association with the harbor. Interestingly, a similar association between the sector of a settlement closer to the embankment of the river and to a possible harbor and furnaces was noted in the Old Kingdom settlement at Buhen, where the furnaces were thought to be related to copper smelting⁸¹ but were possibly also used in the process of pottery production. As in Old Kingdom Buhen,⁸² two stone retaining walls parallel to the longest side of the harbor were noted at Serra East: they formed two higher terraces, the upper one characterized by at least five parallel 2×7 m rooms with an entrance facing the harbor.⁸³ The basin of the harbor silted up after its abandonment in the late Middle Kingdom, as suggested by the materials collected in its fill.⁸⁴

Similar rock-cut basins intended for harbors may have characterized other fortresses, and this solution was possibly adopted where natural bays were not available, as traces of such structures were noted elsewhere (e.g., at Kor).⁸⁵ Interestingly, a natural port may have also been present at Kor, which may explain the selection of this spot for building the large fortified enclosure, but it may have silted up.⁸⁶ These facilities are associated with large fortified stone enclosures, perhaps ancillary to the nearby site of Buhen, related to the need to protect temporary camps or to provide temporary accommodation for beasts of burden and staff of caravans.⁸⁷ This large enclosure is reminiscent of the empty fortified areas surrounding some fortresses, such as that of Buhen itself and the one at Mirgissa.

Open spaces could have been multipurpose; allotted for marketing⁸⁸ or, most likely, for accommodating caravans and expeditionary forces.

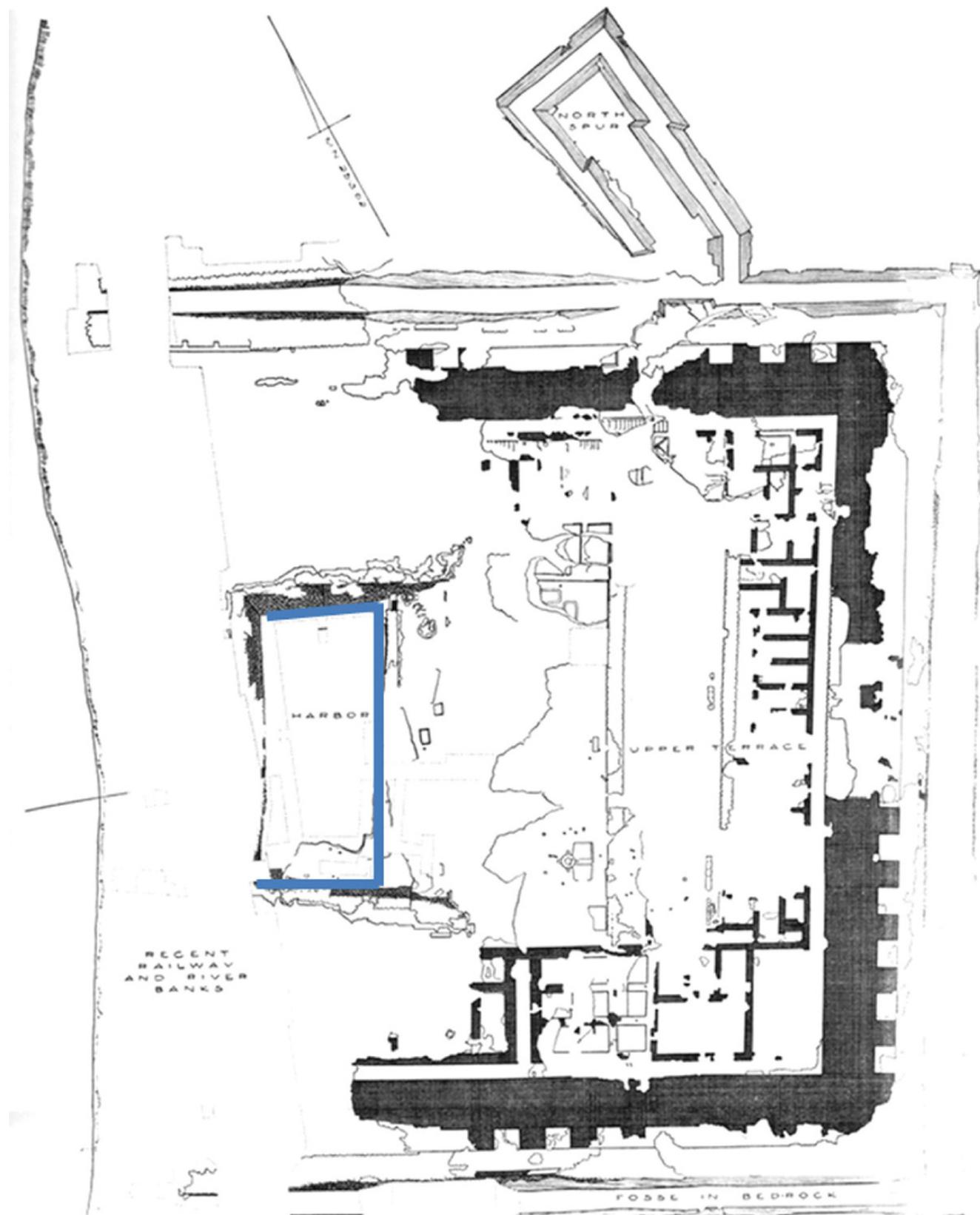


Fig. 6.10. Map of the fortress at Serra East with a basin cut in the riverside with edges marked by retaining stone walls forming a kind of internal harbor (blue highlight) (after Knudstad 1966).

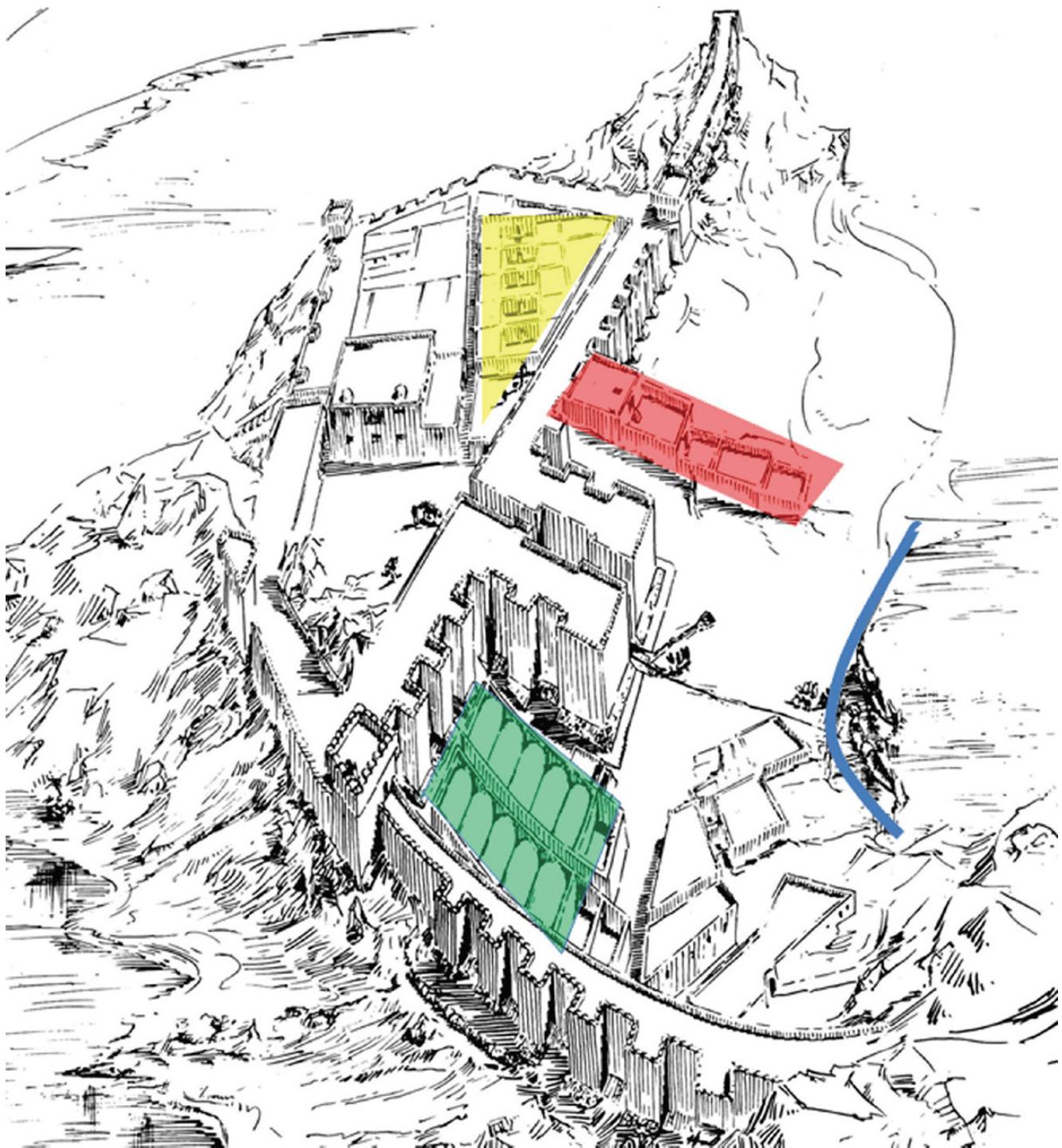


Fig. 6.11. Reconstruction of the fortress of Askut showing the location of the granaries (yellow highlight), the temple (red highlight), the storerooms (green highlight) and the natural harbor (blue highlight) (after Badawy 1966).

In the case of Askut, located on an island (immediately north of a smaller island where a further pharaonic site was recorded), the harbor may have consisted of a bay sheltered from the stream on the eastern side of the island. The only gate of the fortress was apparently oriented toward this harbor: a storehouse, a bakery and brewery were located there, while the granaries were inside the walls but near the gate (Fig. 6.11).⁸⁹ During the New Kingdom – and possibly earlier – a chapel was located outside the eastern defense wall, abutting the wall itself,⁹⁰ and it dominated the harbor area. The equipment recovered in the chapel consisted of Egyptian ritual objects and tools, but the jewels collected there, perhaps suggesting a Hathoric cult, were both of Egyptian and Nubian type.⁹¹

At Aksut, as in most other fortresses characterized by an irregular perimeter related to the rugged terrain,⁹² the location of the harbor is less apparent and shown only by the presence of riverside gates

or spurs. In the case of Uronarti, located on an island like Askut, a mooring place may have been accessed through a northern gate, a part of the perimeter of the fortress where the stairs leading to the river for water supplies were also located (Fig. 6.12).⁹³ The area of the mooring place was perhaps protected by the long spur with protruding towers only on the western side extending to the north, and on the southern side by a smaller L-shaped spur.⁹⁴ This mooring area is located on the eastern side of the island where the fortress was established and where the flow of the river is slowed by some rocks immediately upstream.⁹⁵ The mooring area was accessed through a passage on the roof of the underground water-supply stairway leading to a stone-built quay.⁹⁶ An inscription stressing the difficulties of navigation in the region of the Second Cataract during the campaign of the 19th year of Senwosret III was also located there.⁹⁷ Interestingly, the constructions inside the fort that were closer to the access to the mooring area can be identified as granaries.⁹⁸ This proximity may have facilitated their refilling with supplies brought via the Nile. At Uronarti, a shrine where the stele commemorating the establishment of the southern Egyptian border in the 16th year of Senwosret III may have been originally erected was located at the base of the fortifications (although its preserved remains mainly date to the New Kingdom phase of use of the fort): it dominated the mooring area, not far from the river stairway and from the point where the northern spur abuts the fortified enclosure.⁹⁹

A similar mooring area east of the fortress also characterized Shalfak, downstream of Uronarti. At Shalfak a river stairway accessed through the northern gate led down to the top of the quay, protected, as at Uronarti, by a spur of the fortified enclosure extending to the north.¹⁰⁰ No trace of a shrine near the mooring area was found.

Near the southernmost limit of the Second Cataract, two mooring areas may have been used. They are immediately upstream and downstream the rocky banks that almost entirely obstruct the river in the Semna-Kumna region. The first one may be identified with the large and protected bay near the modern village of Semna West and the ancient fortress of Semna South (Fig. 6.5, A),¹⁰¹ while the second one may have been located immediately downstream of the rocky banks and near the fortress of Semna West (Fig. 6.5, B).¹⁰² This last mooring area may also have been accessed through the river corridor of the fortress of Semna West, delimited on each side by a thick mud-brick wall isolating it from the quarters it passes, located not far from the passage facilitating the water supply.¹⁰³ Interestingly, in this case the inner area of the fortress closer to this access may have been occupied by granaries, storerooms, and perhaps by a temple, while the barracks and other accommodations were in the western wing of the L-shaped enclosure.¹⁰⁴

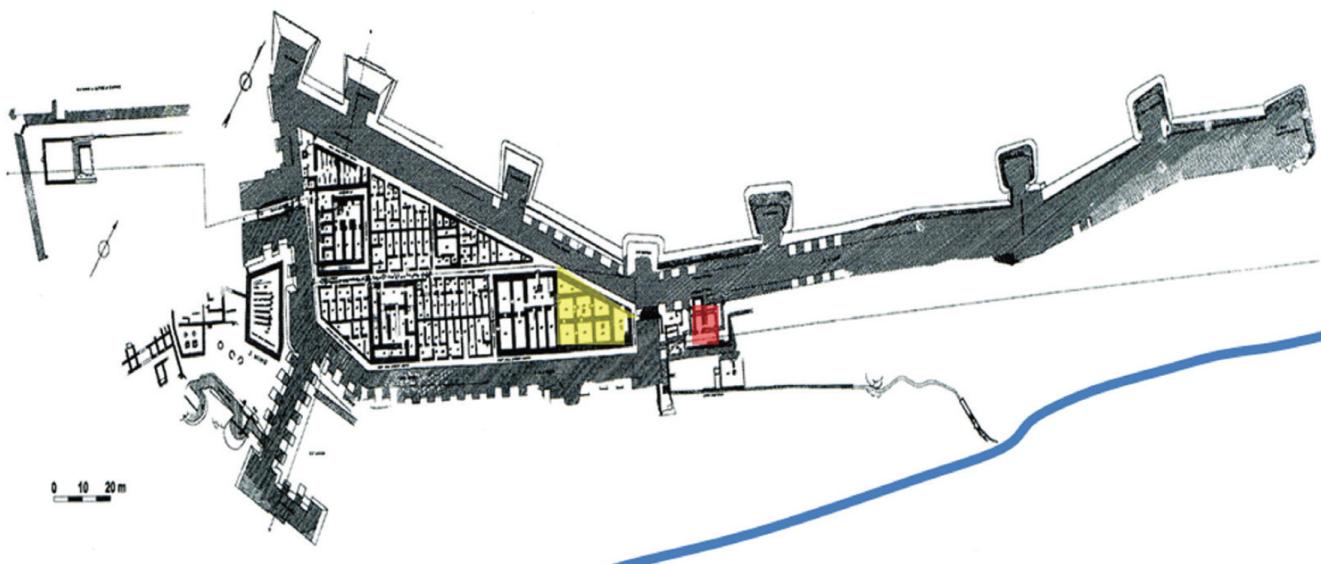


Fig. 6.12. Map of the fortress of Uronarti showing the location of the granaries (yellow highlight), the temple (red highlight) and the natural harbor (blue highlight) (after Dunham 1967).

The fort of Kumna (at the southern end of the Second Cataract and located on the eastern bank of the river just opposite Semna West) is close to two possible bays suitable for mooring boats, one upstream and one downstream of the rocky natural barrage almost completely obstructing the river (Fig. 6.5, C).¹⁰⁵ That the upstream mooring area was controlled from the fort is indicated by a spur-wall overlooking it and extending from the perimeter of the fortified enclosure. Near the same upstream mooring place, the occurrence of a high embankment of stones built out toward the river was noted just south of the Kumna village.¹⁰⁶ Nevertheless, the presence of a true harbor area at Kumna should be considered cautiously, not only for the uncertain date of the previously recorded embankment but also because the only gate of the fortress was oriented to the north (i.e. in the opposite direction of the possible mooring area) and the water stairway was also on the north-western corner of the fortified enclosure, reaching the river in a place not suitable for landing boats during high waters.¹⁰⁷ Therefore, the spur overlooking the upstream bay may have been intended solely to prevent the use of the mooring and landing in this spot by hostile forces in the time of siege.

The harbor of Kush

It is interesting to compare the structures related to the harbors of the Egyptian Middle Kingdom fortresses with those at Kerma, located immediately south-west of the capital of the kingdom of Kush.¹⁰⁸ South of the Egyptian frontier, the river and thus the structures related to it represented important factors in economic and socio-cultural development. This may be suggested by, among other things, the representation of boats in the decorative program of the funerary chapel of a king of Kush ca. 250 years later than the establishment of the Egyptian fortresses described above.¹⁰⁹ Despite that the harbor quarter at Kerma is largely covered by the present town, some structures were excavated in the framework of archaeological rescue operations.¹¹⁰ However, unfortunately it was impossible to investigate the organization of the embankments, the only description of which is perhaps the one offered by Lepsius¹¹¹ while mentioning a dam parallel to the Nile, west of Kerma. It can safely be assumed that the harbor of Kerma was characterized by storerooms (at least one dating to the early second millennium BCE and thus contemporary with the above described installations in the Egyptian fortresses in the Second Cataract region) and by administrative buildings one dating from 1750–1550 BC, characterized by stone foundations and apparently fortified (Fig. 6.13, C).¹¹² The use of stone in these buildings may also be explained by the need to provide safer foundations for very thick walls in a sector of the settlement close to the river and thus more humid, as well as for isolating the internal rooms from humidity. Not far from these structures, several shrines and a temple dating from the early to the mid-second millennium BCE were located.¹¹³ In particular, the latest temple, dating to ca. 1750–1550 BCE, seems to be characterized by a pylon and an internal organization similar to Egyptian shrines (Fig. 6.13, B).¹¹⁴

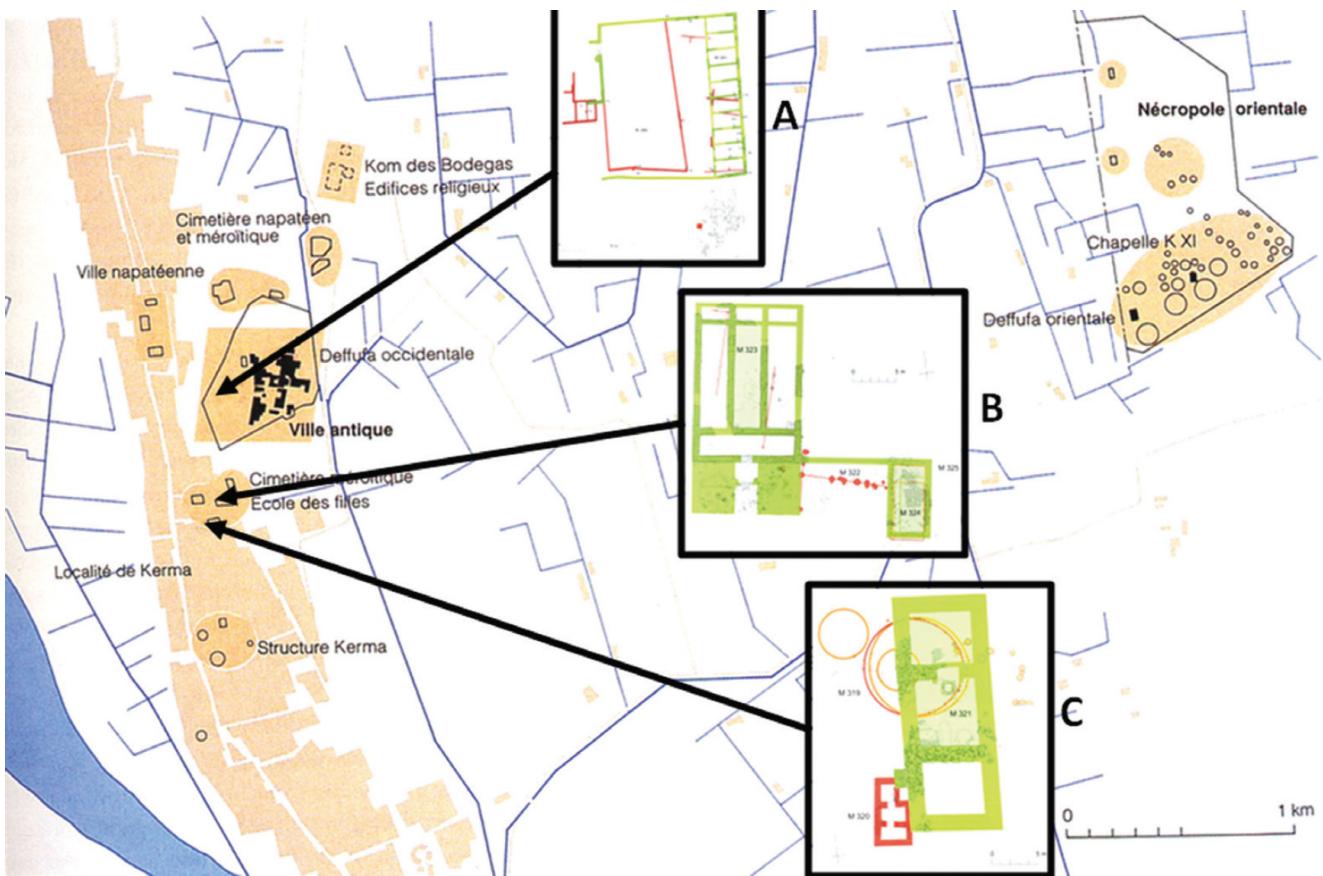


Fig. 6.13. Map of Kerma showing the location of the main structures to be considered as related to the harbor area, i.e. one of the two storerooms with a row of parallel rooms and a courtyard (A), a temple with pylon (B) and a fortified storage and administrative building (C).

Two buildings consisting of a row of parallel rooms, possibly storerooms, and a courtyard that evokes the outline of a caravanserai, date from ca. 2000 BCE onward and are located near the royal quarter and the western (main) gate of the city, giving access to the river.¹¹⁵ These may well be considered as related to the harbor too (Fig. 6.13, A).

Final remarks

The above discussion on the relations between the fortresses and the linear defenses, slipways, and possible spurs, as well as on the military flotilla based at least in some of the fortresses, suggests that the function of the Second Cataract fortresses can be fully appreciated only if they are observed from the Nile and in the perspective of the control and management of activities that took place on the river. Of course, the harbors played a crucial role. Different solutions for localized problems were adopted, as outlined in the description of the harbors of the fortresses and possibly related to the different environmental setting of each fortress also affecting its general outline.¹¹⁶ Nevertheless, some shared elements and approaches can be identified. Among them, in particular, was the location of the granaries and sometimes the storehouses, usually not far from the harbors and/or close to the gates that allowed access to the harbors, perhaps to make the management of goods and supplies easier. Granaries and storehouses built in or nearby state-established centers are related to the control of trade by the state itself, as described in the texts.

Similarities and differences between the Egyptian and Kushite systems are clear. The fortified administrative building and the storerooms in the harbor area, as well as the caravanserai-like structures near the western gate giving access to the river area at Kerma, likely serve as testimony of an Egyptian-like system of control in Kush too, as confirmed by the evidence of intense administrative activities taking place near the gates of its ancient capital city.¹¹⁷ Nevertheless, some differences between Kerma and the Egyptian forts can be remarked, as the granaries at Kerma are not related to

the harbor and are not concentrated in a specific area of the settlement, but seem to be widely distributed across the place since *Kerma ancien* times.¹¹⁸ Of course, this may be related to the fact that while the Middle Kingdom fortresses depended on supplies dispatched from Egypt, Kerma was located in a large and highly productive region with rich agricultural lands and pastures, from which food supplies could arrive directly to the capital.¹¹⁹

Some remarks can be proposed if the location of the temples is taken into consideration as well. It was suggested that the temples were located inside the fortifications in the case of larger fortresses, while in the case of smaller forts, where there was not enough space inside, they consisted of small shrines outside the fortified enclosure.¹²⁰ But this remark is largely a conjecture, as the identification of Middle Kingdom temples inside the fortresses has always been debated and challenged with suggestions that all of the shrines may have been located outside the fortified enclosures.¹²¹ Interestingly, the *extra-moenia* shrines when identified seem to be clearly related to the harbors, as in the above described cases of Uronarti and Askut. If the disputed identification of temples of some Middle Kingdom structures inside the larger fortresses is accepted, the hypothesis of a connection between the temples and the mooring area or the harbor is not weakened, as shown by the cases of Semna West and Buhen, where the possible temples are located close to the gates giving access to the harbor.

It is reasonable to wonder if such shrines were regarded as sacred or important both by the Egyptians and the southerners arriving by boat to the fortresses. Were they, in some way, protecting the activities conducted in the harbors and mooring areas, as well as the trade and exchanges taking place there, which would serve both parties' interests? In the case of Buhen, evidence of a temple of Horus was found, whose sacral significance was somehow recognized not only by the Egyptians but also by the Kushites during the Second Intermediate Period, perhaps to be identified with the Northern Temple, outside the inner fortified enclosure.¹²² In this case, that the sacredness of the temple was recognized both by the Egyptians and the Nubians may be related to the political situation in the Second Intermediate Period, characterized by the extension of political and military sphere of influence of the kingdom of Kush over Lower Nubia,¹²³ rather than to the occurrence of shared sanctuaries that offered divine protection for places where contacts and exchanges took place. Nevertheless, it is interesting to note that the Northern Temple was located outside of the inner fortified enclosure of the fortress, in a larger empty area delimited by a more external enclosure that was perhaps used for providing temporary accommodation or security to caravans or for marketing. Also, the occurrence of ritual objects both of Egyptian and Nubian types in the fortresses at Askut¹²⁴ may be considered a trace of the development of syncretistic religious practices to be expected in places that were locations of interaction and exchange. Such a practice remains difficult to demonstrate, as the Nubian elements found in the sacred contexts may originate from the interaction with local inhabitants of Lower Nubia and not with the Upper Nubian or even more southern peoples.¹²⁵ Perhaps, similar syncretistic religious characteristics can also be detected in the sacred area of the harbor of the capital of Kush, at least during the last phase, when a temple with an Egyptian outline was built. The recognition of their sacredness may have represented a further characteristic of the harbors in Nubia, a not unknown trait in other cultural and historical contexts.

Notes

1. See also Adams 1977, 181, 183; Emery *et al.* 1979, 100; Leprohon 1994, 289; Obsomer 2007, 56–57; Török 2009, 84–85.
2. Smith 1991, 125; Kemp 2006, 235; Lawrence 1965, 72; Török 2009, 87–88, 89–90; Vogel 2010b, 11–12; Vogel 2013, 80.
3. Adams 1977, 187–188.
4. Smith 1991, 125–126.
5. Clarke 1916, 157; Leprohon 1994, 289–290; Török 2009, 85; Vogel 2010b, 10.
6. Kemp 2006, 240; Smith 1991, 125–126; Török 2009, 92; Vogel 2010b, 35.
7. Smither 1945, 6, 10.

8. Török 2009, 13–14.
9. Adams 1977, 184–185; Lawrence 1965, 72; Trigger 1976, 71.
10. Dunham 1967, 34–35; Vogel 2010b, 52–53.
11. See, e.g., Obsomer 2007, 58; Smith 1991, 126, 1995, 42–43.
12. Smither 1945, 6–7, 10.
13. Adams 1977, 184; Trigger 1976, 71.
14. Dunham and Janssen 1960, 7; Emery *et al.* 1979, 7; Lawrence 1965, 73; Vogel 2010b, 25, 49; 2010a, 428.
15. See, e.g., Smith 1995, 28.
16. Emery *et al.* 1979, 101–102; Kemp 1986, 123–134; 2006, 240–241; Smith 2013, 280; Török 2009, 92; Vogel 2010a, 425–427.
17. Vila 1970, 175–177.
18. Smith 1995, 51–52; see also Török 2009, 91, 96–97.
19. Smither 1945, 4; Vogel 2010b, 53–54.
20. Smith 1991; 1995.
21. Smith 1991, 107; 1995, 22–24.
22. Kemp 1986, 130; Smith 1991, 116–117; 1995, 44–46; Vogel 2010a, 425.
23. Clarke 1916, 159; Emery *et al.* 1979, 100–101; Smith 1991, 107–109, 128, 132; Trigger 1976, 68–69; Vercoutter 1955, 18.
24. Kemp 1986, 133–134; Smith 1991, 117; 1995, 47.
25. Smith 1991, 109–115; 1995, 47–48.
26. See, e.g., Clarke 1916, 170; Lawrence 1965, 73; Adams 1977, 184.
27. Emery *et al.* 1979, 3, 102; Lawrence 1965, 72; Vila 1970, 161, 172–173.
28. See, e.g., Smith 1995; Vogel 2010b.
29. Piacentini 1990, 12, 20, line 45; Gasse and Rondot 2007, 79–80, n. 147, 128–130, n. 233–234, 137, n. 242; Obsomer 2007, 65; Török 2009, 86.
30. Smith 1995, 43; Török 2009, 89; Vercoutter 1970, 13–15; Vila 1970, 172–173.
31. Vercoutter 1970, 204–214, figs 11–17; see also Creasman and Doyle 2010, 18–20, figs 13–15.
32. Creasman and Doyle 2010, 19–20.
33. Vercoutter 1970, 168.
34. Vercoutter 1966, 129, 131–132, fig. 4.
35. Dunham and Janssen 1960, 113, 130–131, 139–141, pls 93, 95–96.
36. Vercoutter 1966, 132–142.
37. Clarke 1916, 176.
38. See Yvanez 2010, 8–10.
39. Vercoutter 1966, 152–164; see also Hoffmeier 2013, 184.
40. Žabkar and Žabkar 1982, 13–16; see also Yvanez 2010, 11.
41. De Putter 1993; 1996.
42. See Vercoutter 1994, 322; 1995, *contra* De Putter 1993, De Putter 1996.
43. Vercoutter 1966, fig. 4.
44. See De Putter 1993, 278–279; 1996, 52; see also note 7.
45. Vercoutter 1970, 15, pl. xi, a.
46. Tallet *et al.* 2012, 421–422, figs 9, 28–29.
47. De Putter 2003, 282.
48. Vercoutter 1994, 323.
49. Török 2009, 89; Vogel 2010b, 35; 2013, 78; Žabkar and Žabkar 1982, 12–13.
50. Lawrence 1965, 71; Vogel 2010b, 26–27; 2013, 77–78, fig. 3.
51. Obsomer 2007, 58.
52. Smith 1991, 130; 1995, 42.
53. Vercoutter 1966, 129–130
54. Smith 1991, 131; 1995, 42–43; Obsomer 2007, 66–67; see also Trigger 1976, 68, 72; Vogel 2010b, 35.

55. Adams 1977, 185–186
56. Emery *et al.* 1979, 101.
57. Adams and Nordström 1963, 23.
58. Vogel 2010b, 53–54.
59. Vila 1970, 174–175; see also Vercoutter 1970, 22; Vogel 2010b, 45.
60. Vila 1970, 188–190, pl. 14, a–b; see also Adams 1977, 182; Frost 1996, 878.
61. Vila 1970, 189.
62. Zazzaro and Abdel Maguid 2006; see also Frost 1979, 147–149; 1996, 878.
63. Leprohon 1994, 288; Yvanez 2010, 17, 19.
64. Emery *et al.* 1979, 7, 103; Vogel 2010b, 26.
65. See Welsby 2004.
66. Vogel 2010b, 27; see also Steindorff 1937, 2–6
67. Steindorff 1937, 11–14, Taf. 2–3, Blatt 3, Abb. 6, 8, Blatt 9, Abb. 18.
68. Steindorff 1937, Taf. 6.
69. Emery *et al.* 1979, 101–102.
70. O'Connor 2014, 7, 15, 329.
71. Emery *et al.* 1979, 7–8; Vogt 2010, 27–28, 100.
72. Emery *et al.* 1979, 100.
73. Kemp 2006, 235, fig. 85.
74. Emery *et al.* 1979, 11, pl. 34.
75. Vercoutter 1970, 65–67, 174–176, figs. 4, 9.
76. Vercoutter 1970, 171.
77. Vercoutter 1970, 191.
78. Vila 1970, 177.
79. Knudstad 1966, 176–177, fig. 2; see also Török 2009, 86; Trigger 1976, 75.
80. Knudstad 1966, 174.
81. Emery 1963, 117, fig. 3; O'Connor 2014, 220–228.
82. Emery 1963, fig. 3; O'Connor 2014, 19–33, figs 2.1, 2.2.
83. Knudstad 1966, fig. 2.
84. Knudstad 1966, 173–174.
85. Arkell 1950, 27; Smith 1966, 188.
86. Vercoutter 1955, 4–6; see also Emery *et al.* 1979, 102.
87. Lawrence 1965, 86; Smith 1966, 231–232; see also Emery *et al.* 1979, 101–102; Trigger 1976, 65; Obsomer 2007, 60; Vercoutter 1955, 18.
88. Lawrence 1965, 81.
89. Smith 1991, fig. 2; 1995, 54–56, fig. 3.3.
90. Smith 2003, 124, 126.
91. Smith 2003, 125–126.
92. Trigger 1976, 69.
93. Dunham 1967, 12–13.
94. Dunham 1967, 4; 12; Vogel 2010b, 31–35.
95. Dunham 1967, 3.
96. Dunham 1967, 19–20, pl. xiii, c.
97. Dunham 1967, 34–35, pl. xxv.
98. Kemp 1986, 123–130.
99. Dunham 1967, 4, 12–14; Vogel 2010 b, 34.
100. Dunham 1967, 119–121, pl. li, B.
101. Vercoutter 1966, fig. 1; Vogel 2010, 36–37.
102. Vercoutter 1966, fig. 10.
103. Dunham and Janssen 1960, 7, pls 8 A, 6 C.
104. Kemp 1986, 130; Vogel 2010b, 36–39.
105. Dunham and Janssen 1960, 113.

106. Dunham and Janssen 1960, 113.
107. Dunham and Janssen 1960, 115.
108. Kerma was the side of the capital city of the political power controlling the regions beyond the southernmost Egyptian fortresses on the Second Cataract and very likely the main opponent of the military campaigns to the South recorded as Kush in the texts of the Egyptian Middle Kingdom kings; Török 2009, 86–88.
109. Bonnet 2000, 70–72, 88–91, 96, figs 52, 63, 65.
110. Bonnet 2014, 19, 209.
111. Lepsius 1897–1913 5, 245–247.
112. Bonnet 2014, 12, 209–211, figs 125–126, M 320–321.
113. Bonnet 2014, 212–214, figs 127–128.
114. Bonnet 2014, 214.
115. Bonnet 2014, 64–65, M 42, 125–126, fig. 77, M 280–281, 233, fig. 142.
116. Kemp 2006, 231, 236.
117. Manzo 2015.
118. Bonnet 2014, 238–239, 241–242, 252.
119. Bonnet 2014, 8, 242.
120. Vogel 2010a, 427; 2010b, 50.
121. Vercoutter 1970, 191–192; Vogel 2010a, 427.
122. Emery *et al.* 1979, 3; Smith 1976, 76–78.
123. Török 2009, 114.
124. Smith 2013, 277.
125. See, e.g., Smith 2003, 134–135; Smith 2008, 353–354, fig. 16.5.

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